

AMERICA'S RACE TO VICTORY

AMERICA'S RACE TO VICTORY

BY
LIEUT. COL. E. RÉQUIN
OF THE FRENCH ARMY

WITH AN INTRODUCTION BY
GENERAL PEYTON C. MARCH
CHIEF OF STAFF

WITH TWELVE DIAGRAMS



NEW YORK
FREDERICK A. STOKES COMPANY
PUBLISHERS

D570
.R42

Copyrighted in France, by
LIEUTENANT COLONEL RÉQUIN

Copyright, 1919, by
FREDERICK A. STOKES COMPANY

All rights reserved

525 15 1919

©CLA536977

no 1

INTRODUCTION

In "America's Race to Victory" Lieutenant Colonel Réquin has presented a vivid and stimulating picture of the problem which our country faced in April, 1917, the faulty organization with which we at first attempted its solution and the gradual steps by which our national endeavor gained momentum until it swept everything before it in what was, indeed, a "race to victory."

To this work of appreciation of the military, industrial and political effort of another nation Colonel Réquin applied a mind stamped with the General Staff "doctrine" of Marshal Foch and the French *Ecole Supérieure de Guerre* and developed by battle experience during the first two and half years of the war.

Until his arrival in the United States with Marshal Joffre in May, 1917, Colonel Réquin knew little of our military resources and nothing of our national character, our political system or the obstacles which were to be overcome. But he at once comprehended our po-

tential military strength, our military attributes hidden beneath our apparent commercialism and all the intricacies of our national existence.

With the trained eye of the experienced general staff officer he saw also the weak points of our military system and, with infinite tact, unremitting industry and a keen perception of relative values, set about the difficult and delicate task of helping us produce strength where there had been weakness and order where there had been chaos.

Colonel Réquin's assistance contributed materially to our military success. As he himself says, he "never for one instant doubted the Army of the United States." This intimate collaboration with American comrades and this undying faith in our arms have given him a peculiar fitness to undertake the interpretation of the development and employment of our army.

"America's Race to Victory" does not profess to be a comprehensive history of our participation in the war. It is rather a tribute to our national spirit rendered affectionately and proudly by a comrade in arms who was close enough to see our faults but yet at the same

time able to retain the perspective necessary to visualize our effort as a whole and who never lost the faith which made success a foregone conclusion.

(Signed)

P. C. MARCH,
General, Chief of Staff.



COMMAND IN CHIEF OF
THE ALLIED ARMIES
THE MARSHAL

GENERAL HEADQUARTERS

June 19th, 1919

NOTE

FOR LIEUTENANT-COLONEL RÉQUIN

I am returning to you herewith your manuscript on "America's Race to Victory."

Aside from a few little matters of detail, which you will find noted in Chapter VIII, the quality, and general tone of the work, and the spirit in which it was conceived, appear to me most praiseworthy.

I cannot do otherwise than approve its publication.

Cordially yours,
(signed) FOCH.

FOREWORD

The motives which determined me to write this book are three-fold:

I was struck by the difficulty experienced equally by my compatriots and by my friends in America in forming a correct mental picture of the great work accomplished by the army of the United States, and by its Chiefs on both sides of the Atlantic.

I had observed that, according to the point of view at which they were placed and the impressions which they received, either from the front or the rear, their judgments were apt to fluctuate in the course of the last year of the war between unreserved admiration and the most unjustified disillusion.

Lastly, in putting these still recent memories in order, I have experienced a personal satisfaction which I shall not try to hide, in realizing that, alike in the darkest hours and in the most glorious of days, I never had an instant's doubt of the Army of the United States.

This is not a history of the war, nor even of that final period in which the American

army took such a splendid part, for the moment has not yet come to pass judgment on the operations themselves.

It is solely the military effort and its results that I have undertaken to discuss — an effort judged by a Frenchman who had the rare good fortune to follow it from its beginning, and the distinguished honor of sometimes collaborating in it.

At this moment, when the echo of the formidable battles which have shaken Europe for four and a half years still rings in our ears, and may well confuse our brains, I do not pretend to set forth here the whole truth, not even regarding the events which took place apart from the field of battle. But in striving to reach as near as possible to the truth, I may perhaps aid the reader to find it for himself. I dedicate this study to all those alike from far or near,—those who came to us from the United States or who remained at home to organize victory,—who have personally aided us in gaining it: to you, my comrades, who marched to the music of the cannon from the new world to the old, impatient to intervene in the great drama of battle, and who fell in full glory in the fulfilment of the last act.

May your names remain piously graven on the memory of every Frenchman, just as the lofty and humane ideal for which you died remains forever inscribed upon the folds of your Star Spangled Banner.

(Signed) Lieutenant Colonel E. RÉQUIN.



CONTENTS

	PAGE
INTRODOCTION	v
NOTE	ix
FOREWORD	xi

CHAPTER I

MILITARY SITUATION IN EUROPE IN THE SPRING OF 1917

AN ESTIMATE OF AVAILABLE FORCES. THE NATURE OF THE WAR PROBLEM FACED BY THE ALLIES	1
---	---

CHAPTER II

THE MILITARY POWER OF THE UNITED STATES IN APRIL, 1917

THE WAR PROBLEM FACED BY AMERICA AND THE MANNER IN WHICH SHE SOLVED IT	16
THE DECISION TO SEND OVER AN EXPEDITIONARY FORCE AND TO ORGANIZE A GREAT ARMY—THE PASSAGE OF THE CONSCRIPTION ACT	16

CHAPTER III

THE MILITARY PREPARATION IN THE
UNITED STATES

	PAGE
I. THE REORGANIZATION OF THE ARMY AND THE SPIRIT WHICH INSPIRED THIS REORGANIZATION	36
The First Expeditionary Division	45
The Problems of the American General Staff	46
General Pershing's Plan	49
Building the New Army	54
II. MATERIAL ORGANIZATION OF THE CAMPS. EQUIPPING AND ARMING THE ARMY	62
III. AMERICAN WAR INDUSTRIES	73
Small-Arms	74
Artillery Matériel	75
Aviation	80
IV. TRAINING THE ARMY	82
V. THE PLAN FOR TRANSPORTATION	100
VI. GREAT ADMINISTRATIVE REFORMS	105

CHAPTER IV

THE PREPARATION IN FRANCE

GENERAL PERSHING'S RÔLE — ORGANIZATION OF BASES, LINES OF COMMUNICATION AND THE TRAINING OF TROOPS — FIRST PARTICIPATION IN ACTIVE FIGHTING THROUGH THE ASSIGNMENT OF A SECTOR TO AMERICAN UNITS	114
--	-----

CONTENTS

xvii

CHAPTER V

MILITARY SITUATION ON THE WESTERN FRONT IN MARCH, 1918

	PAGE
WAITING FOR THE GREAT GERMAN OFFENSIVE . . .	132

CHAPTER VI

SITUATION OF THE AMERICAN ARMY IN MARCH, 1918

RESULTS OBTAINED BY ONE YEAR OF PREPARATION .	139
THE AMERICAN ARMY ON THE EVE OF BATTLE . .	139

CHAPTER VII

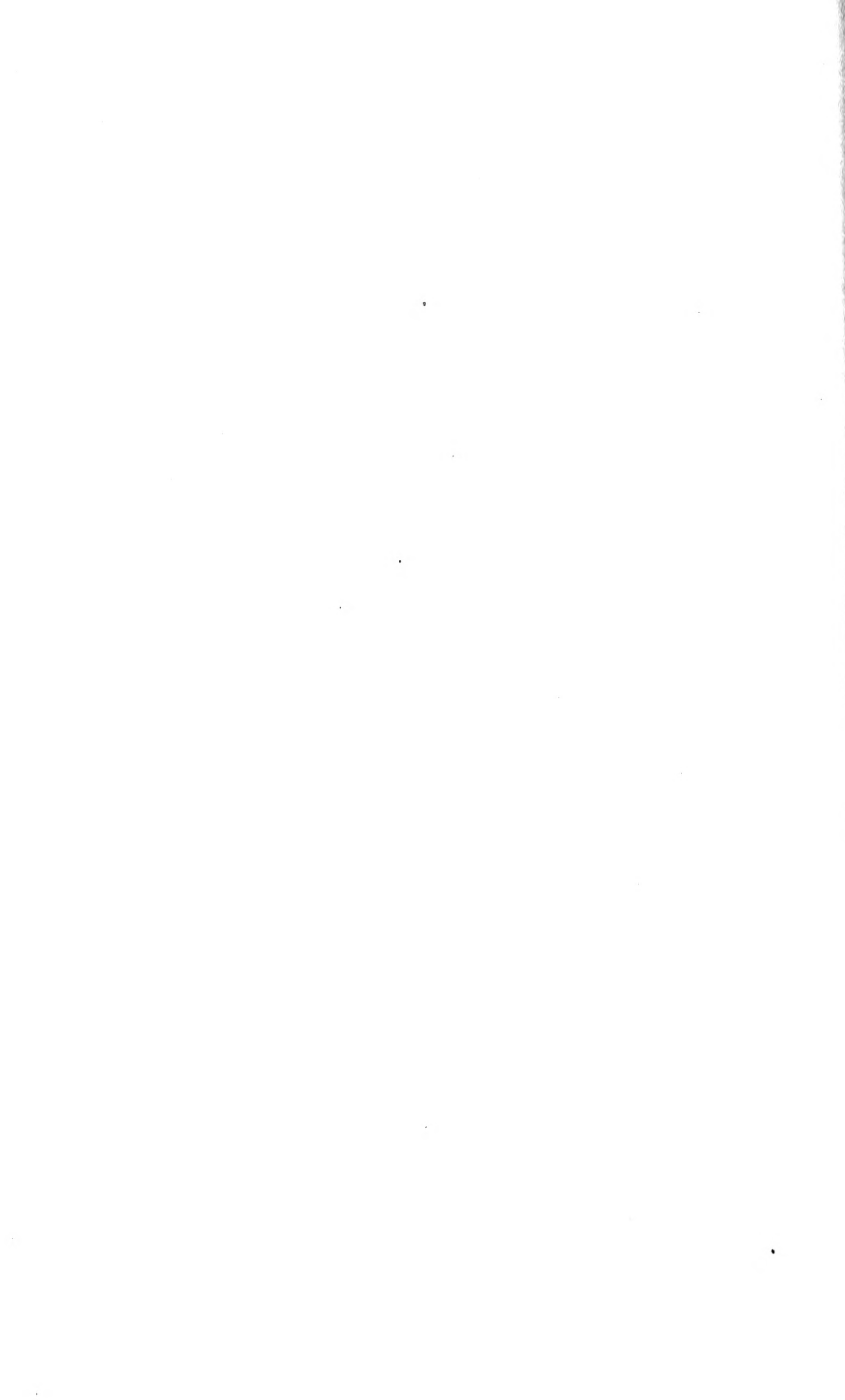
THE AMERICAN ARMY'S MARCH TO THE TUNE OF THE GUNS

FROM MARCH TO NOVEMBER, 1918	152
--	-----

CHAPTER VIII

THE AMERICAN ARMY IN BATTLE

THE PART IT PLAYED JUDGED BY MARSHAL FOCH .	174
CONCLUSION	197
INDEX	207



AMERICA'S RACE TO VICTORY



CHAPTER I

MILITARY SITUATION IN EUROPE IN THE SPRING OF 1917

*An Estimate of Available Forces. The Nature of the
War Problem Faced by the Allies*

The United States entered the war at the moment when the Entente were about to undertake operations of a decisive character agreed upon by the Commanders in Chief, November 15, 1916, at the Inter-Allied Conference at Chantilly.

The plan of action thus established at the close of 1916 for the year 1917 amounted in effect to concerted offensives on all the fronts of the Coalition, at a date approximating as nearly as possible to April 1st, with due allowance for the climatic conditions of each theatre of operations.

Since America did not declare war upon Germany until April 6, 1917, her army could not take part in the campaign of 1917.

If we wish, however, to realize the unquestionable value, both national and moral, of her intervention early in 1917, we must recall how the great and well founded hopes of the Coali-

tion crumbled under the double blow of the Russian collapse and the prolonged disorganization of the Inter-Allied High Command.

Accordingly, it is easy to understand that the promised despatch of American troops to the French front, and their arrival in 1917, were a potent factor in effacing the painful impression of the events of the spring.

The campaign of 1917 had been planned by the Allies to the end of obtaining a decisive victory, and it was to this end that they ought logically to have planned it.

The Allied armies had, in point of fact, attained at the opening of 1917 a maximum strength which they were certain that they could not surpass, and which they were not sure of being able to maintain, in view of the losses suffered by their armies and the relative exhaustion of their resources in men.

The old principle of war, which consists not only in uniting all your means before acting, but quite as much in acting on the instant that all your means are united, at last found its application in the forces and plans of the Entente.

The new British armies, sent to the front in 1916 and transformed by organization and training into an instrument of war of the

highest value, comprised a total of 79 divisions, of which 62 were in France, equipped with 3000 field guns, 2000 heavy guns, almost all modern, and supplies of ammunition amounting to 11 million shells for field artillery and 4 million shells of large calibre.

But the British General Staff already foresaw that the measures taken by the Home Office for maintaining the army's strength at the front would be insufficient. New methods were being studied to remedy this, without any clear certainty that they would prove successful.

The Italian army, augmented by 10 divisions during the winter, attained a total of 55 divisions (52 of which were on their own front), to which were added numerous formations amounting numerically to about 10 more divisions. Italy would be able to maintain her strength throughout 1917, even allowing for heavy losses; her military coöperation promised to be serious and well ordered.

The Belgian army comprised 6 divisions of full strength, perfectly equipped, regularly trained, in excellent condition both physical and moral, ready for action, but without sufficient reserves to maintain a prolonged battle.

The Russian army, utilizing its enormous

resources in men, was expected to augment its strength by some 60 divisions before the summer of 1917, according to the plan announced by the High Command at the Conference of November, 1916. Even granting that this programme should not be carried out, Russia would nevertheless, so it seemed, enter the campaign with her 200 existing divisions, 185 of them on the European front, assuming an increase of 39 divisions since the Inter-Allied Conference of November 15th. The Allies had furnished Russia with important resources in artillery matériel and ammunition. She in return could have furnished an additional 2,000,000 of fresh troops, had it not been for the difficulties and delays that the Revolution engendered in her military organization. It is true that the eventual outcome of this Revolution, then barely launched, was largely speculative. Nevertheless the Provisional Government seemed to be making genuine efforts to overcome the difficulties of the moment, and it was still possible to hope that the Russian army, better equipped than it had ever been before, would bring to the Coalition the serious support of its enormous strength in men.

The Roumanian army was reorganizing rapidly with the aid of a French military mis-

sion of high efficiency; and it was already assumed that it would return to the front before the summer of 1917 under highly honorable conditions.

Lastly, measures were being taken to maintain, if not to reinforce, the small and unconquerable Serbian army, whose fighting qualities had once more been proved by its successes at the end of 1916 in the sector of Monastir.

The French army, which since 1914 had been sustaining the heaviest drains, because of the intensity and continuity of its effort, had attained its maximum strength: 118 divisions, of which 109 were in France; 2,965,000 men under arms, of whom 192,000 were in the Orient; guns and ammunitions of war estimated, on its own front, at:

5800 field guns

3650 heavy guns

20 million shells for field guns

7 million shells for large calibre guns

But from the opening of 1917, the problem of numerical strength claimed the attention both of the General Staff and the Government of the Republic. It became apparent that its maintenance during 1917 was going to impose such sacrifices upon the nation that in the com-

paratively near future it would be necessary to make reductions in either the composition or number of the large units.

On the enemy's side the principal adversary, Germany, was putting forth an exceptional effort to utilize the sum total of her resources in men, and to intensify her industrial output. She recalled the difficult conditions under which she had been obliged, in 1916, to replace Austrian forces with a part of her own forces, in order to check at any cost the victorious thrust of the Russians; and her object now was evidently to send to the front the largest possible number of fighting units, in order to be prepared for any new development of a similar sort. At the beginning of April, 1917, the German army already numbered 214 divisions, of which 150 were on the Franco-British front; and the programme for her new formations was expected to raise these figures to a total of 242 divisions before the end of 1917. This, apparently, was to be Germany's maximum effort, and from this epoch onward the French General Staff predicted that the maintenance of such a number of divisions in a battle of prolonged duration and sustained intensity would exceed even Germany's possibilities,— a prediction which was justified in 1918.

Germany's war matériel was estimated at 9200 field guns or light howitzers and 6800 heavy guns.

To sum up, the German army still appeared to be a redoubtable adversary that had developed its strength to the limit, but to this end had mortgaged the future unconditionally.

Austria, far from forming new divisions as Germany was doing, had been obliged to reduce her army by two or three large units, in consequence of the losses of 1916. Her resources in men were of small value, partly because they included many hospital cases re-enrolled for the fourth time, and partly because of the extreme youth of the class of 1919, which had already been called to the colors. She numbered at most 79 divisions, of which 45 were on the Russo-Roumanian front.

Taken as a whole, the value of her army had diminished; its morale had been shaken; and the keen jealousies of its mixed races were steadily hastening its disintegration. In the eyes of the French General Staff it was a structure whose outer walls were still standing, but seamed with cracks that foreshadowed its collapse if Germany did not hasten to prop it up.

The most that can be said of the 13 Bulgarian divisions is that they still constituted a

solid army, with sufficiently well stocked supply depots, but an army that was visibly weary of war.

As for the Turks, their manifestly and rapidly diminishing forces had dropped from 50 to 45 divisions, and these incomplete and insufficiently equipped, with resources in fresh troops limited to approximately 200,000 men for the needs of the coming campaign of 1917.

Accordingly, the available forces of all the armies at the outset of April may be summed up as follows:

178 Allied divisions against 150 German divisions on the Anglo-French front;

62 Italian divisions against 32 Austrian divisions on the Italian front;

200 Russian divisions (without counting the small handful of Roumanians) against 127 divisions of Germans, Austrians, Bulgarians and Turks on the Russo-Roumanian front;

24 Allied divisions against 15 Enemy divisions (the latter, to be sure, of fuller strength than the Allied divisions) on the Macedonian front.

Considering only these figures, it was evident that on all the fronts there was a numerical superiority in favor of the Allies. This superiority could not be modified or destroyed ex-

cept by the bringing into action of some 30 solid divisions of the newly formed German troops, or by that element of political uncertainty which is inherent in every coalition when put to the test of time.

Numerical strength, however, was only one factor in forming an estimate; other factors were the High Command, the morale, the training of the troops and the use which they could make of the new, complete and varied equipment.

Seen from these different points of view, the Anglo-French armies united all the conditions required for conducting a decisive action, with just one exception — the most important of all — unity of command. The Allied Governments, having been unable to reach an agreement on this essential point, had hoped to make up for it with understandings or formulas that, unfortunately, were too vague to work successfully.

This did not alter the fact that the British and French armies, in position to bring into line as the opening move of the campaign, a total of 100 divisions, represented together an offensive force that had never been surpassed.

The form of battle contemplated by the High Command relied largely upon ma-

noeuvres to break up the methodical organization of the German offensive. But this plan, conceived at the close of 1916, gave no promise of great results except on the sole condition that they could acquire and maintain throughout the entire duration of the action a considerable numerical superiority. Now, from the time when the plan had been conceived, the numerical superiority of the combined Anglo-French forces had not ceased to shrink day by day, through the arrival of new German divisions coming from the East.

Consequently it was upon the other armies, and particularly the Russians, that the task reverted of facilitating by concerted and sustained offensives the manoeuvres upon which the Coalition relied for success. On the Russian side this hope was doomed to disappointment.

The Revolution, by first weakening and later disorganizing the Russian army, progressively set free forces which the German General Staff hastened to transfer to the Western front; it was while these transfers were being made that the Allies opened the battle of April 14th.

The very limited success of the French offensive at its opening gave rise to a disappointment that was at least premature, followed by

a halt in operations. The inevitable consequences were a change of French Commander in Chief, and a wave of demoralization throughout the army which even the energy of the new Commander in Chief, General Petain, had no small difficulty in counteracting.

By the end of April the game of 1917 had been played. The fighting was destined to be resumed at various points, but under the form of a warfare of attrition. We were destined to see numerous Commanders in Chief of equal distinction try out numerous other plans, perhaps equally good, fight numerous British or French battles, all equally glorious — but with no decisive result.

Although American military intervention could not modify the result of the campaign of 1917 — since, I repeat, the game had already been played and lost for the current year — it was none the less necessary that it should take place without a delay.

Accordingly, the first manifestation of force resulting from the despatch of American troops to Europe was destined to have a profound influence not only upon the morale of the army, following as it did upon the morrow of the above mentioned crisis, but also upon that of the whole nation profoundly stricken

by the events of April. If the France of 1917, weakened not so much in her material forces as in her morale, recovered rapidly, she was powerfully aided in this recovery by the United States.

From the American point of view, an immediate participation in the struggle was the best means of making the whole American nation understand the character of the war and the burdens that it imposed.

It was, besides, the only way of hastening the organization of an effective war machine which, as will be seen further on, had to be built up in all its detail.

In regard to the enemy and the neutrals, the landing of American troops on French soil would be a clear declaration that America pledged herself without reserve, and that she would employ, to borrow the expression used by President Wilson, "All her power and all her resources to bring the Imperial German Government to terms, and force it to end the war."

From the point of view of the direction of operations and of the future campaign, an examination of the forces of the Coalition revealed the difficulty of keeping these forces at the level attained in 1917, and showed that in

view of the situation created by events in Russia, the small addition of an American army had become indispensable for carrying out in 1918 any new plan of action of a decisive character. Now, in order to be ready in 1918, the American army, assuming that one existed, would have to be landed in Europe in 1917, and undertake and complete in France those great works of installation and communication without which a modern army is foredoomed to impotence.

Since this army, in point of fact, did not yet exist, it was doubly necessary that, as soon as it was created, it should be brought over at the earliest possible moment to complete its organization and its training in France, in that atmosphere of battle which doubles every energy, intensifies every effort and hastens every decision.

To sum up, the campaign of 1917 might have been decisive. Logically it ought to have been. But it was not decisive, and even in the month of April, 1917, it was clearly seen that it would not be. Nothing remained to the Allies but the hope of winning a decisive victory in 1918, and it was towards this single goal that they must bend their entire energies. This was the

moment for America to enter the contest; it was equally her duty to enter it now.

For, considering the rate of losses suffered by the Allies, and the cost in material and in morale to the nations at war since 1914, it was becoming evident that if the Allies did not win the war in 1918 they ran the risk of being forced into a lame and halting peace by unforeseen events, beyond the control of their guiding minds. Dissatisfaction was increasing in all the countries. It was the expression of a general reaction of the whole organism of Europe against the sufferings of a prolonged war.

It was this conviction which, with implacable logic, proclaimed the necessity of not losing a single day, of accomplishing the indispensable at once, even at the cost of wounding personal vanities, of shaking off inertia, breaking down resistance, arousing the half-hearted, all with the sole motive of *one and all working together for the decisive battle of 1918*; it was this conviction, I repeat, which the Allies strove to impress upon the United States. In spite of slowness, delays and blunders, in spite of everything, it is due to the fact that the United States had awakened to this conviction *while there was still time*, that she was able to play in

the last act of the world war that part upon the battlefield which she had elected to play.

Such being the problem of the war in the spring of 1918, how did America propose to solve it?

CHAPTER II

THE MILITARY POWER OF THE UNITED STATES IN APRIL, 1917

"It is plain enough how we were forced into the war. The extraordinary insults and aggressions of the Imperial German Government left us no self-respecting choice but to take up arms in defence of our rights as a free people and of our honor as a sovereign Government."

(President Wilson's speech, June 14th, 1917.)

The War Problem Faced by America and the Manner in which She Solved it

THE DECISION TO SEND OVER AN EXPEDITIONARY FORCE
AND TO ORGANIZE A GREAT ARMY — THE PASSAGE
OF THE CONSCRIPTION ACT

We know why America entered the war. President Wilson made it clear to whole world. He repeated it to the first troops that sailed, when he reminded them that they were going to France to defend the honor and liberty of the United States.

But how,— and by this I mean, with what fighting equipment,— did she enter the war? This is what we need to understand, before we can measure the extent and the might of her military effort.

In April, 1917, America brought to the service of the Allies, not only her 102 million in-

habitants, but also her immense natural resources and that incomparable industrial activity which she had developed in times of peace.

Now, despite these resources; notwithstanding the inflexible will of the President, the energy of the Chiefs to whom he was about to entrust the task of organizing an army, the quality of the men whom Acts of Congress would furnish, and lastly and most notably, the spirit which had enrolled this great people in the cause of liberty,— in spite of all this, it was nothing less than astounding to see in what a state of *military unpreparedness* the United States had undertaken to enter the war.

And surely, if we tell the whole truth it will tend, not to diminish, but rather to exalt the merit and the fame of those who controlled America's destiny and guided her military efforts. In view of the glorious goal achieved, there should be no hesitancy in revealing the starting-point, since between the two we behold a great people marching to the cannon's music, over-striding the Atlantic in pursuit of their immutable objective, which their national interests and their noble ideals had alike proclaimed from the day of their setting forth, and which their energy finally attained.

Those who belong, like us Frenchmen, to a nation perpetually obliged to maintain, in defense of its rights and its life, a military organization ever ready for service, cannot conceive of the incredible difficulties represented by the transformation into a modern military power, — and this, too, within the space of a few months,— of a nation whose geographic situation, past history, political ideals and established institutions had guided it solely toward the works of Peace.

At the moment when President Wilson decided to join the Allies of the West, to save the honor of America and the Liberty of the world, the American people were as far from war as their shores were distant from the European battlefields.

In comparison with the enormous armies that the two opposing Coalitions had at their disposal, what did the total military strength of the United States amount to?

A Regular Army of approximately 200,000 men and a National Guard of about 150,000.

The first was animated by the finest traditions of bravery and honor.

The latter drew its sole strength from that virtue which every American citizen possesses in a greater or less degree: his sense of duty.

Both of these forces were imbued with the purest patriotism, but their organization was out of date, their training and armament were totally insufficient and inadequate for the new form that warfare had assumed since the end of 1914.

The basic unit of this army was theoretically, at least, a *Division*, comprising three Brigades of three Infantry Regiments, three Artillery Regiments, one Cavalry Regiment, one Regiment of Engineers and the various other branches of the Service,— in short, a unit practically impossible to use in modern warfare.

All the belligerent armies had ended by adopting an approximately uniform type of Division, which represented the true *fighting unit*, comprising all the organic parts indispensable for living, moving, and carrying out an offensive or defensive action. These Divisions, British, French or German, were *interchangeable* in each army. They constituted, on the checker-board of modern warfare, the pawns which the High Command moved at pleasure to carry out its offensive and defensive combinations. These same Divisions were employed when going into battle. Now the American Division was found, in point of fact, as a result of its organization to be incapable

of playing this rôle: it was too heavy owing to the large number of its regiments, too feeble owing to the insufficient proportion of artillery and machine guns, and the total absence of the new engines indispensable alike for attack and defense (howitzers, trench-mortars, hand grenades, rifle grenades, automatic rifles, infantry guns, etc.).

For that matter, even assuming that the American Division could have been equipped with these various engines of war, its defective composition and its weakness in companies of infantry would have prevented it from making effective use of them.

Furthermore, these huge American units did not exist, excepting on paper, and practically the army had to be re-created on entirely new bases.

The American officers had been unable to follow the difficult phases of the formidable struggle, except from a distance, through the columns of the press, or the reports of their courageous ambulance drivers (both men and women). And yet the United States had assigned a number of excellent officers as observers with the British and French armies. Unfortunately, the information which these officers furnished regarding both the material

organization and the methods of combat of the Allied armies remained practically unutilized.

Both the Intelligence Department and the organization of the American General Staff were so defective that the information furnished by these officers was neither appreciated at its just value, nor put in order and used.

Consequently, what changes were taking place remained only imperfectly understood by the great majority of American officers. The profound reasons underlying these changes, the constant evolution in methods of combat, with their consequent effect on material means, on the training of troops and the instruction of the higher officers wholly escaped them. The best informed only got so far as to conceive, with no small effort, the *superficial* physiognomy of a battle as conducted *in 1915*. And even these constituted a very small number, without authority and without influence upon the others. The majority revealed, by the very nature and multiplicity of the questions they asked of their British or French colleagues, their total ignorance of the war they were about to engage in, and at the same time their eager desire for enlightenment.

No general officer had ever exercised the sort

of command that he would be called upon to assume in the very near future.

No school was ready to receive the thousands of officers whom it was necessary to drill and instruct, in order to prepare Commanders for the new army; and by an inexplicable anomaly the essential schools which had formerly been in operation (General Staff Schools, School of Fire for Field Artillery) were closed. But all the officers, with the exception of a negligible minority who persisted in considering as final the instruction formerly received at West Point, were eager to learn and to know. The youngest of them attacked their task with such zeal that the days promised to be too short to satisfy their thirst to be quickly and thoroughly taught.

The General Staff was composed of officers of high distinction, possessing a solid military knowledge and an extensive general culture, but ridiculously few in number, and distributed between the War College and the War Department, with no rational organization into divisions, or effective specialization. Accustomed to endless meetings and conferences which even with the best of them threatened to kill the spirit of decision, they were deprived of the necessary means and authority to accomplish

the enormous task which might well have caused the best constituted of General Staffs to hesitate.

As a matter of fact, the American General Staff included some excellent officers, but considered as a General Staff it did not exist.

Its Chief of Staff was, by the laws and regulations then in force, deprived of that high authority which he ought to have exercised over his own Staff officers, as well as over the several Departments of the army.

The central administration seemed organized with a view to peace and not to war. Is it necessary to recall that only the branches and departments presenting a special interest in times of peace had responsible Chiefs at their head? Such were the Engineer Corps, the Signal Corps, the Medical Corps, the Coast Artillery. But by an anomaly which can be explained only by the essentially pacific policy of the United States, there existed no directors responsible for the organization and instruction of the essentially fighting branches of the service: the Infantry, the Field Artillery, the Cavalry! Consequently, the great interests of these three branches must perforce be entrusted to departments which had neither the competence nor authority nor responsibility that were

essential. And thus it happened that throughout a long period there was no one man at Washington from whom one could get a final decision on a question of Artillery!

The essential organization constituted in France and in the neighboring countries by the Direction of Artillery in times of peace, supplemented during the war by the Ministry of Munitions and Fabrications, existed in the United States only in embryonic form. The Ordnance Department, comprising a few specially trained officers, could not materially take the place of a Department that is indispensable to assure the supply of war matériel required by the newly created forces. It would have been overwhelmed from the start.

The Air Service was yet to be created in all its details, at a time when discussions concerning the organization and employment of Aviators was at its height.

But above all it was necessary to apply, both to the existing organizations and to those yet to be created, the great principles of direction and subordination, of coördination of efforts and division of work, which give to the military machine its full efficiency, provided, of course, that we add the motive power, that is to say the Chief.

The American army, in times of peace, could not grow except within the modest proportions fixed by the law of 1916, which set the limit at 300,000 men for the Regular Army and at 450,000 for the National Guard, with a corresponding increase every three years. The President, however, was authorized to see that this increase was effected if in his judgment the condition of the times demanded it, and he had decided, as an initial step, to accomplish this between April and August, 1917. But this measure fell far short of satisfying the needs of the new organization, which could be met only *by resorting to conscription*. Accordingly, it was essential to make the public understand the imperious necessity of having Congress act quickly on a question which, at any other time would have shocked the pacific mind of the United States.

Unquestionably, public opinion arose like a single man behind the President; and those who were the guests of the United States in April, 1917, will never in their lives forget the wild enthusiasm of the crowds, the pledges offered by those thousands upon thousands of men, women and children, with clear and resolute eyes.

When their National Hymn arose from

these crowds, or when they filled the arching heavens above New York with the accents of the *Marseillaise*, we experienced a profound emotion such as one feels in the presence of a controlling force of future destiny — but how remote was this future? Would it be to-morrow — or somewhat later?

Would it be too late? The whole problem centered there, immense and full of anguish.

Upon entering the war, the people accepted its heavy burdens, but accepted them with closed eyes; they could not yet realize them, and since they did not yet realize, the question might well be asked, in what manner they were going to support them.

The first indication, however, was encouraging. I refer to the clear-cut determination of the people to understand the war, its form, its development, its consequences. Now, anyone who sincerely wishes for knowledge is already prepared to be instructed. The American people, at a distance of some thousands of kilometres from the war, may well serve as a striking example.

What one of us has not heard repeated scores of times the same identical phrase: "The people don't realize!" Naturally, the American people could not "realize" the war, before be-

ing informed and enlightened as to the conditions of the war; but, apart from the Government's duty to inform them — a duty which was duly performed — the people ably proceeded to inform themselves, and the part played by the press, by public speeches, by the American war correspondents, by all sorts of agents under all sorts of titles, was immense and of great benefit. It would be impossible to give too much credit to this passionate desire for the truth, and to those who undertook to satisfy it.

The result was commensurate with the effort. The American people were so quick to understand the war into which they had entered, that we were able to say to our American friends, "Beware of the phrase '*The people don't realize!*' Never trust to it as an excuse for delaying necessary measures. Never say, 'We are behindhand, because the people don't realize.' Say instead, 'We have not an hour to lose, because the people will be quick to realize.' " And, in point of fact, progressively from East to West, all America entered the war.

Early in the month of October, Mr. Lane, Secretary of the Interior, returning from a trip through the West, was able to say, "The war

spirit is magnificent in the western states. The West, like the East, is determined to carry the war to a finish."

It was not enough, however, to realize the war; it was necessary above all, to realize the *value of time* as a factor in the war, and not merely in the war as a whole,— which in itself is none too easy,— but more especially *in the last act of the war, which was about to begin.*

Truth requires that I should indicate here a distinctly American trait which, fostered by the love of progress, may nevertheless result in war-time in grave miscalculations. I refer to that paramount desire to do something "American," in other words, something better than anything that the others have yet done.

To be sure, in a war that represents a constant evolution, one must never cease to progress. At the same time the essential thing is to do *well* before trying to do *better*.

For when once the battle is joined, it runs its course implacably; and one does not have at one's disposal, as in times of peace, the leisure to make all the experiments that one would like. The enemy is there, face to face. Before attacking him with the *best means*, we must guard against him with *what means we*

have, especially when they have been tested by our colleagues.

In other words, we do not make war with the means that we would like to use, but with those that we have, and we perfect them later on, when we have the Time!

My excuse for calling attention to this American trait is that, while pointing down the road of progress, it is capable of leading one astray from that beaten daily path which must be followed if one is to progress. More specifically, it is because of its regrettable effects upon the production by the United States of modern engines of war. The fact that America's mistakes were minimized, thanks to the output of the Allies' war industries, is no sufficient reason for passing them over in silence. There is a lesson here for the future, which America will not fail to bear in mind.

What the United States found difficult to recognize, before realizing the implacable nature of this war, was that, coming into it, as she did, in the last act, she had no time to indulge in experiments. What she had to do was to get ready for the decisive campaign of 1918, not, of course, with all her forces, but with forces enough to coöperate effectively, and

with reserves ready to throw their weight into the balance in the final settlement.

The conception of the value of time did not penetrate readily into every brain. It did not always find expression in the most appropriate measures. But in the end we shall see that it made steady progress, up to the moment when the German offensive in March, 1918, demonstrated the truth of the Allies' contention.

In the first days of May, 1917, the Government at Washington received the Allied Commissions which came successively to pay their respects to the American people, and to set forth their views of the present and future situation.

After consulting the Heads of the British and French Commissions, and after receiving the advice of the victor of the Marne, President Wilson, with a spirit of decision and a grasp of present and future needs that today we can hardly overpraise, decided to send without delay an Expeditionary Corps to France, to constitute the advance guard of the great army which the United States had decided to raise and equip during the progress of the war, to the end of assuring a victorious issue.

In a few days the American General Staff, notwithstanding the limited number of its con-

stituent officers and the faulty organization that we have already emphasized, established in collaboration with the first French and British officers to arrive in Washington, the details of an Expeditionary Corps, organized in full conformity with exigencies of modern warfare. All discussions were curtailed, and all difficulties overcome. The Staff resolutely adopted what the experience of the Allies, and more particularly that of France, indicated should be done. It would seem that there has hardly been enough appreciation shown for the value of this first work, and the spirit in which the American General Staff conducted it.

Indeed, if we bear in mind the difficulties set forth above, if we recall the rapidity with which the Expeditionary Corps was created, and finally if we reflect that its organization achieved in the first essay the practically unchanged type of the future American Division, we must concede that its organization redounds to the highest credit both of the American Military Mission, which had first conceived it in Paris, and to the officers of the American General Staff who perfected it at Washington.

The first Expeditionary Corps was destined to serve, in a measure, as an experimental unit for the General Staff of the American Army in France, making it possible to complete the

investigations ordered by General Pershing as a basis for his subsequent recommendations.

Appointed Commander in Chief of the Expeditionary Forces on the 14th of May, General Pershing preceded his army to France. On the other side of the Atlantic he began the colossal task of organizing a great army, on the threshold of the battlefield on which it was destined to be engaged almost before it was formed.

In order to understand the world-wide effort of America, we must follow its simultaneous development in the United States and in France; for the task accomplished in France was not merely, as one might be tempted to think, a continuation of the other. We shall see presently that the problem was much more complex. It was not merely a question of completing the training of an army initiated in the United States, which would have been a simple problem of coördination. But it was necessary to carry on simultaneously a double organization, both in the United States and in France, where the greater part of the matériel¹

¹ Matériel: This word has been adopted in the American army for the past 16 or 17 years in a sense quite different to the military mind from the English word "material." It means everything which constitutes the army outside of "personnel," a word which the American army has also adopted. "Material" is rather *raw material*, which, when made into guns, etc., becomes "*matériel*."

of war (cannon, munitions, aeroplanes, etc.), were delivered to the troops after their debarkation. Consequently the units arriving in France were either incompletely equipped or not equipped at all; and furthermore this lack of matériel was a heavy handicap, not only in organizing but also in training the troops in the United States.

The first decisions made by the Government of the United States up to the date of May 14th may be summed up as follows:

The despatch of an Expeditionary Corps;

The formation of a great army, on lines to be determined by General Pershing in collaboration with the Allies;

The despatch to Europe of divisions of this new army, after giving them a preliminary training in the United States;

The despatch of officers preceding the troops to the Anglo-French front, in order to complete their training;

Direct and immediate support, generously given to the Allies by the despatch of special troops (Engineer troops, Ambulance Service, regiments of railroad men, foresters, etc.), destined to relieve the corresponding services in the British and French armies.

These decisions found their confirmation a

few days later through the passage of the War Act which furnished the necessary means for carrying them out.

By the terms of this Act, the President of the United States was authorized:

1. To bring the Regular Army and the National Guard up to maximum strength by conscription, if there were not sufficient volunteers to reach the strength authorized by the law of 1916.

2. To issue a call September 1st for a first contingent of 500,000 recruits destined to form the "National Army."

3. To levy later a second contingent for the same purpose.

4. Lastly, to make from the men subject to conscription under the law a levy of whatever number might be required to constitute or maintain the units whose creation might be necessitated by the war.

These basic decisions having once been made, it remained only to apply them, and to this end to conduct simultaneously in the United States and in France certain preliminary lines of study and work, so that when the first contingent furnished by conscription should be called, their organization, training and transportation could be carried on simultaneously.

In the following chapters we shall examine the manner in which this preparation was accomplished in the United States and in France, from 1917 to 1918.

CHAPTER III

THE MILITARY PREPARATION IN THE UNITED STATES

"We are about to carry the flag into battle, to lift it where it will draw the fire of our enemies. We are about to bid thousands, hundreds of thousands, it may be millions, of our men, the young, the strong, the capable men of the nation, to go forth and die beneath it on fields of blood far away."

(President Wilson's speech on June 14th, 1917.)

1. The Reorganization of the Army and the Spirit which Inspired this Reorganization.

The plan for a general reorganization of the army was elaborated in the United States in accordance with the recommendations cabled by General Pershing.

It was on American soil that the constituent elements were formed and assumed their first cohesion; and there the instrument of war was forged.

Its creation represents an immense work, the work of an entire people. It was the fruit of relentless effort, the fulfilment of the combination of individual wills, progressively coordinated by the American Government. The men who accomplished this task, unique in the annals of the world, contributing to it all the vigor of their minds and bodies, deserve our admiration and our gratitude.

And we have no hesitation in granting these in full measure when we realize that they went to work handicapped by a defective central administration, with imperfect methods, and fully aware of all these defects, but without the means of remedying them otherwise than by additional energy, perseverance and effort.

In view of the irresistible wave of public opinion that resulted in the passing of the Army Act of the month of May, we might have been prepared for radical administrative reforms that would forthwith transform the central military organization. On the contrary, this necessary transformation took place only through successive reforms, distributed over six or eight months, carefully studied by the Secretary of War, imposed by the force of circumstances and demanded by steadily awakening public opinion.

During the initial period, which was a period of studies that already required decisions and commands, even the best of men, shackled by hampering laws, could not have rendered the best accounts. By themselves they could do no better than they did. With a different organization and with different methods they could have done far more.

And perhaps it might have been possible to

reduce, if not to avoid the hesitations and delays, inseparable from every new organization, which characterized the period from May to August, 1917.

The task, it must be conceded, was arduous. The United States, in common with other countries, but perhaps to a greater degree than other countries, had a natural repugnance to modifying its laws.

There is never a complete absence of danger in changing what already exists, whether good or bad, without being ready to offer a substitute; and the idea of proceeding by evolution, instead of adopting revolutionary methods, is in itself a wise idea. Accordingly, the Government at Washington did its utmost to reconcile the indispensable new measure with the existing laws; but such a combination was often none too easy!

Consequently, in pointing out that the evolution progressed slowly, we must carefully guard against inferring that, considered in its entirety, it could have proceeded much more rapidly. Eventually it resulted in a complete reform of the War Department, reorganized on a new basis, by a man whose name will remain associated with the great work of prepar-

ing the American Army: the Secretary of War, Newton D. Baker.

With a mind open to all new ideas, and placing the quest of truth above all considerations of national or personal vanity, Secretary Baker gave to the War Department in as full a measure as he deemed it possible to give, the organization, the Chiefs and finally the productive activity which found their justification in 1918.

On the other hand, the Government of the United States, having appointed a General in Chief and sent him to France, showed the great merit of placing full confidence in him.

In point of fact, there devolved upon General Pershing not only the responsibility for the operations of the American Army in the future, but the task of determining the means of action of which he had need, and consequently of recommending to the Government at Washington a plan for the organization of an army, a plan for its training, and a plan for its transportation.

General Pershing's Staff represented "*The Front.*" But it was "*The Rear,*" that is to say America, on whom it devolved to furnish the means which he requested; and in the course of preparations in the United States

there were initiatives to be taken and decisions to be made which General Pershing could not always either inspire or dictate.

In other words, the United States found itself obliged to hasten the work of preparation, the details of which could not be supervised by the Commander in Chief of the Expeditionary Forces: — for he had too much else to do.

In this connection, it may be pointed out, that the relative inaction of the General Staff at Washington, and the lack of military Chiefs duly invested with indisputable authority resulted in much too long delays. This disadvantage was aggravated by a lack of close relations between the Rear and the Front, the Staff officers in America being manifestly too little informed as to what their Expeditionary Force was doing in France.

Regardless of the cause, and without awaiting the result of the studies being pursued in France by the Staff of the Expeditionary Forces, it ought to have been possible, one would think, to settle officially a class of questions regarding which no doubt should have existed.

For example, was it necessary to wait four months before appointing and sending to

France the future division commanders, with a part at least of their respective Staffs?

Was it necessary to wait three months before opening an Artillery School in the United States? — or before working out, in collaboration with the Allied governments, a plan for transportation, which *could not in any case* have been put into execution except by close coöperation between the Allied Navies?

Evidently not.

For General Pershing could not in any case have failed to wish to have personal direction of the training of his subordinates and future collaborators; he could not have failed to wish for the arrival of Artillery officers already trained; and it certainly was not within his power to procure transports at the moment when it was declared in Washington that there was none to be had.

And all this was so true that, in his first recommendations, General Pershing insisted with all his might upon the urgency of obtaining decisions upon all points that it was then possible to decide. For that matter, is not the whole problem of army communication based on the fundamental principle of establishing it *from the Rear towards the Front*?

We will conclude by saying:

That if it was justifiable to await General Pershing's recommendations and to follow them scrupulously in everything concerning the general plans of organization, training and transportation, it would still have been preferable to take day by day and *without delay* such measures as must in any case aid the execution of these plans, relieve the crushing burden of the Commander in Chief of the Expeditionary Forces, and lastly, save precious time.

* * *

The causes, however, which delayed the work which should have been done, were not only of an administrative nature; they were also psychological.

Certain reforms encountered the opposition of an obstinate minority of officers whom their temperament, their military training or their age debarred from new ideas. Perhaps they were all the more antagonistic to these innovations because the latter appeared to them to be demanded far less by the experience of a war unknown to them, than by the very men who had made that war, that is to say, by *foreigners*.

This obstruction by a minority, in point of fact so small that it could have been reduced

to figures, contrasted so sharply with the current thought of the American people, and with the enthusiasm of the officers of the new army as a whole, that while one might regret it, one could not really be seriously troubled by it. For was it not a fact that in the army, just as in the Diplomatic Service, just as in all branches of National activity, routine was destined to disappear, swept away by the breath of the great war, borne on the new current towards truth, clarity, reality!

Such was to be the fate in the United States, as throughout the entire world, of retrograde administrations and ideas.

It was in the general setting of this evolution towards progress that a solution was found, from 1917 to 1918, of the problem of organizing, training and transporting the American army, all leading up to the simplest but also the most difficult act, its employment on the battlefield.

Without following day by day the development of this organization, we may note in the following pages its principal stages.

Nothing comparable with it had been done since the formation of the British armies in 1915-16. Besides, the problem faced by the United States offered conditions of peculiar

difficulty, since, aside from men and money, everything had to be either created or transformed. It was possible to shorten the period of preparation; unfortunately, it was not possible to dispense with it.

Now, since 1914 Germany's game had depended upon the inevitable delays in the common preparation of the armies of the Entente. It aimed at wearing out or destroying the armies that were immediately dangerous, before they could receive the direct support of their Allies.

It was the delays of the young British armies in preparing to take the offensive that permitted the German General Staff to wage a local combat with the French army at Verdun from February 21st to July 1st, 1916.

To guard against the repetition of such a situation of war it was incumbent upon America to prepare from the outset an *offensive* army, resolutely overleaping the earlier stages passed through by the several Allied armies.

She could do this only by utilizing their experience; and she had the exceptional merit of being willing to do so.

The First Expeditionary Division

On May 25th the composition of the first Expeditionary Division was announced as follows:

Two Brigades of Infantry, *i. e.* four Regiments, and a fifth Regiment of Marines;

One Brigade of Artillery, comprising three Regiments and a Battery of trench-mortars;

One Regiment of Engineers;

One Battalion of the Signal Corps;

One Air Squadron;

Indispensable Troops and Services.

With some modification of detail in the composition, and more especially in the numerical strength of the units, this first division bore a close resemblance to what was destined to become the model of the future American Division. Nevertheless, it took from 2 to 3 months to decide definitively upon the type of this latter unit. The reason was that in this, as in all other matters, they very naturally wished to have the advice of General Pershing. But it was impossible for General Pershing to pass judgment until he himself had arrived in France, and watched the Allied divisions, if not his own, in action. And owing to the small amount of tonnage available for its transportation, it was going to take two months before

the first American unit could be wholly transported.

The Problems of the American General Staff

Herein lay a serious danger which did not escape the attention of the American Staff officers at Washington.

In the early days of June, 1917, the General Staff decided, in order to save time, practically to adopt as type of the new division, the form of the first division whose composition had been submitted to General Pershing before his departure; and they determined that they should proceed without delay to work out a *general plan* of organization, training and transportation, — for after all it considered that it was best to decide off-hand such questions as depended for solution mainly upon good sense and the necessities arising from the situation of the war.

The first fundamental decisions to be made seemed to present no questions of doubt; furthermore, they could not wait.

The problem consisted first of all in the transportation of an army of a million men, and placing them as quickly as possible at the front, face to face with Germany. For the more rapidly American intervention could be effected, the more prompt would be its success.

Now this depended upon the tonnage, equipment and training.

Taking up first of all the question of training, the American Staff decided that it could and should be conducted on both sides of the Atlantic.

In America it would be accomplished less efficaciously and less rapidly than in France. But the further the training could be pushed in the United States, the sooner it could be finished in France, — that is to say, the sooner the troops could take an effective part in the fighting. This question, the General Staff very justly observed, had no bearing upon the lack of tonnage; or rather, it was the lack of this tonnage which urged them to undertake without delay the training of troops in America. The importance of such training, for troops destined to measure their strength against the German army, was not a question needing demonstration.

As regards the difficulties of organization, the General Staff regarded as most serious the lack of Artillery equipment. But since France was able to furnish this, it was not an obstacle to the despatching of divisions to Europe. Their Artillery regiments could wait to be organized until after they were disembarked.

The other troops could also receive their share of the equipment in France.

To carry out this programme, there was urgent need of constructing vast training camps for the new army in the United States; and the American General Staff concluded by deciding:

1. That 100,000 men per month must be sent to France, beginning with the month of August;
2. That the interned enemy vessels should be utilized for transporting these troops;
3. That 16 divisional instruction camps should be established without delay in the United States.

If it were possible to reproduce here in detail the various propositions offered at that time, it would be surprising to see how close these contemplated solutions came to what was done in 1918.

These propositions, however, mainly repeated those set forth by Marshal Joffre in a lecture delivered at the War College during his sojourn in Washington, in the course of which he outlined before General Scott, the American Chief of Staff, and General Kuhn, President of the War College, what he conceived

that the military effort of the United States should be.

Accordingly, high praise is due to these officers for the spirit of realization which possessed them; and it is a matter of regret that the General Staff did not at that epoch possess greater authority. Otherwise, from one to two months could have been gained for carrying out General Pershing's plan.

General Pershing's Plan

General Pershing's recommendations, and his plan of action as a whole, arrived in Washington in the course of June and July. He was unable to send them sooner; but we have seen that on many points it had been possible to anticipate him and satisfy his requests even before they had been formulated.

The plan submitted by General Pershing to his Government contemplated the employment of a million men in France for the offensive campaign of 1918, to be disembarked before July of that year,—without consideration of the forces that it might be necessary to send to the front later on, nor of the total numerical strength of the future American Army, which he estimated at 3,000,000 men (a numerical strength to be reached within two years).

The million men required by General Persh-

ing were to constitute an army of 5 corps, each corps consisting of 4 fighting divisions and two replacement, base, or instruction divisions.

This was the problem over which the General Staff toiled, finally reaching the plan of organization for the division, approved on August 8th, and that of the Army Corps published March 5, 1918.

At the same time the Chiefs of the various branches and services concerned worked out the first formation of special troops and services essential to a modern army, such as the numerous formations connected with the Engineer Corps, the Medical Corps, the Signal Corps and the Ordnance Department.

What constituted the new fighting units, the organization of which had at last been decided?

The American Division was to comprise:

Two brigades of Infantry equivalent to four regiments made up of companies of 250 men;

One brigade of Artillery, comprising three regiments (one of them a regiment of 155mm howitzers) and a battery of trench mortars;

One regiment of Engineers;

One Signal Corps Battalion;

Fourteen Machine-gun Companies (battalion, brigade or division), and all corresponding services, amounting in total to 27,152 men.

This formation, carefully studied in view of the new necessities of modern warfare, closely resembled, as may be seen, the first division of the Expeditionary Corps. An increase had been made in the numerical strength of the companies of Infantry, raised from 200 to 250 men, and in the proportion of machine-guns, etc., in consequence of which this fighting unit possessed in Infantry a numerical strength almost *double* that of the Allied, or Enemy divisions. Theoretically, it represented the maximum of offensive power which a division could attain without compromising its mobility.

In point of fact, it might be criticized as being too heavy a unit to be handled by inexperienced Staff and Special Service officers. But this disadvantage was offset by the advantage afforded by large numerical strength in a war in which the wastage of the Infantry is very rapid; and it is common knowledge that at the front no unit is ever complete. At all events, it could be considered that the formation of the American Division was now well established.

The army corps which could not be normally constituted until it arrived in France, was to represent a total of more than 100,000 men, even with its limitation to four fighting divi-

sions. This seemed to the Allied Staffs a very large unit to handle. The American Staff, in deciding to adopt it, was obviously influenced by the necessity of maintaining the fighting strength, on an army-corps front, by the method of relieving by divisions, a method which leaves the Army Corps Staff in its sector: which is perfectly true.¹ As a matter of fact, that was the method to which all the belligerents had resorted. But it looked as though the American Staff was trying to improve on this by enlarging all their units, a procedure that was not without danger.

With the short time at their disposal, it really was to be feared that the Supply Services might meet with the most serious difficulties in furnishing supplies for such huge units during battle. And in fact this was what happened several times in 1918.

Parallel to the organization of the larger units, the divisions and the army corps, a collective plan was established for the formation of all the troops and services of the fighting

¹ It is well known that in the course of this war, the Division had become the true fighting unit and that the Army Corps was a ladder-like formation that could include two, three or four divisions, all interchangeable.

forces, whether employed at the front or at the rear.²

A certain number of these special units had been organized at once from the existing resources, by a preliminary decision of July 13th, relative to:

Railroad Regiments;
 Road Service;
 General Construction Service;
 Water Supply Service;
 Forestry Service;
 Supply Trains;
 Survey and Printing Service;
 Mining Service, etc.

This decision was supplemented in the month of August, by the organization of all the troops and services attached to the Engineers, the Quartermaster and the Ordnance Department. But in order to create a new unit, a decision is not in itself sufficient. It is necessary to

² The artillery of the Army Corps comprised:

1 Regiment of 155mm (6 in.) howitzers;
 1 Regiment of 4.7mm American guns;
 4 Brigades of 155mm (6 in.) Filloux guns;
 4 Brigades of Howitzers 8" (English) or 9.5" constructed in the United States after the design of the Schneider Company;

20 Batteries of 2 pieces of 10" guns;
 10 Batteries of Mortars 12 of 3 pieces;

But this comprised only a part of the programme for a heavy and high-powered artillery established at Washington.

study and to fix in detail the exact composition in men, horses, trucks, material, spare pieces, etc. This is a painstaking task, that is embodied in documents known to the French General Staff as *Tableaux d'Effectifs de Guerre*, and to the American General Staff as "Tables of Organization."

This detailed work required weeks to accomplish; but at the cost of sustained application it was at last finished, and the American Army existed on paper. It was now becoming more and more urgent to put these plans into operation. Consequently the War Department did not wait for the arrival of recruits, but immediately utilized the already formed troops of the Regular Army and National Guard, and transformed them in accordance with the new model.

Building the New Army

The constitution of the military forces of the United States was effected during the year 1917 in three progressive phases, from March to October.

The first phase covered the increase of the Regular Army, as was contemplated by the Law of 1916, that is to say, by voluntary enlistment. Such enlistment it was found necessary to supplement by conscription in August, 1917; and the Regular Army was transformed

into divisions of the new type, and approved by the Secretary of War. In July the National Guard was federalized, brought up to full strength by conscription, and formed into divisions of the adopted uniform type. Lastly, the divisions of the National Army were constituted out of recruits called in pursuance of the Law of 1917, from September-October of that year onward.

These three organizations were destined, at no distant day, to be welded together and designated by the single name, "Army of the United States." But in 1917 they were still separate and distinct.

The *Regular Army* was the permanent army in the times of peace. Beginning with the month of July, 1917, the new regiments authorized by the National Defense Act of 1916 were created.³ Divisions of the new type adopted by the Expeditionary Force, up to the authorized number of 8 or 10, were formed successively through a new grouping of the existing units. Unfortunately the lists were still incomplete, and in July the army still showed a deficit of 42,000 men necessary to

³ 64 regiments of Infantry, besides a 65th Infantry Regiment in Porto Rico; 21 regiments of Field Artillery; 25 regiments of Cavalry; 7 regiments of Engineers and 7 Battalions of Divisional Telegraph operators.

bring it up to its full regulation strength of 320,000 men.

The *National Guard* could, under the existing laws of America, be employed in two ways:

The National Guard troops when called out by the President, under the authority of the "National Defense Act," are discharged from the National Guard on being mustered into the service of the United States and become part of the United States Army.

When recently called to the Mexican border the men were not enlisted individually but with their units, under their own officers, and were mustered into the United States Army. Newly appointed officers received their commissions from the President, through the Secretary of War, and not from the Governors of their respective states, for units were no longer under control of their Governor. If, however, the National Guard is called to the service of the United States through the draft, which is conscription of the men who are in the National Guard, these men serve as individuals, and of course the President can nominate the officers and handle the replacements in his best judgment.

It is by the first method that the National Guard was sent to the Mexican frontier. It

is by the second method that it was called in July, 1917.

As far as possible Colonels were supplied from the Regular Army, and all the general officers that could be spared from the Regular Army were assigned to the newly formed brigades and divisions.

Just prior to the regiments being taken into the National Army, they were ordered to recruit up to the present war strength which, in most cases, was difficult. Therefore, exchanges were made from one organization to another, and from the moment of entering into Federal Service the identity of the National Guard units was practically obliterated. (In the case of the 7th Regiment, N. G., S. N. Y., and the 69th Regiment, N. G., S. N. Y.; the 69th Regiment was ordered overseas shortly after America entered the war, and became the 165th U. S. Infantry. To complete its quota, men were drawn who had enlisted in the 7th and other regiments.)

In many cases regimental officers of the various National Guard units were unable to pass the physical examination, and were therefore replaced by Regular officers.

The permanent organization of the National Guard was composed of sixteen divisions. The

42d Division was organized and formed by quotas from all the states of the Union, so far as possible. The purpose of this was to interest the sympathies of the country as a whole in the war. This made seventeen divisions.

In the month of July, 1917, the deficit in the National Guard was something more than 100,000 men.

As regards the *New Army*, or *National Army*, it was yet to be organized, beginning with September, and was to comprise at the start 16 or 17 divisions.

The enlistment of volunteers having failed, up to August 1st, to fill up the gaps in the Regular Army and the National Guard, it became necessary, as the date fixed for the formation of the National Army drew near, to determine what should constitute the first contingent to be called by the Draft.

The resources were not lacking. The number of men included within the scope of the military law of the month of May, 1918, and who had responded to the call, amounted to 8,839,547,⁴ which represented 93.5% of the

⁴ White.	6,712,456
Colored.	925,004
Aliens.	1,093,336
Enemy Aliens.	108,751
<hr/>	
Total.	8,839,547

total number of men affected by the law, out of which it was foreseen that there might be 4,712,180 possible exemptions.

It was calculated that, in order to constitute and maintain all the units authorized by the programme of organization, up to the spring of 1918, approximately 1,500,000 men would be required.

The contingent was at first limited to 687,000, in view of the difficulties of cantonment, officering and equipment, none of which was as yet wholly surmounted. It was destined to be raised by three successive calls, issued at intervals in the course of the month of September.

The American Army of 1917 was planned to consist altogether of 42 divisions, numbered in succession from 1 to 25 inclusive, for the Regular Army, from 26 to 75 for the National Guard, and from 76 onward for the National Army.

But beginning with the month of October, the General Staff worked out the formation of 90 divisions, and by order of the Chief of Staff the programme for Artillery matériel and munitions was computed on a basis of 40 divisions in France, by the month of June, 1918, instead of the 30 divisions requested by General Pershing. It appears from this that the American

General Staff, without awaiting the events of 1918, *had from the first prepared for the growth of the army* under such conditions that success was unquestionable.

Unfortunately the organization of American divisions, which it was essential to accomplish in order to give them an initial adhesion before they left America, was in the practical working out subject to two perturbing causes:

1. The constant transfers of commissioned and non-commissioned officers, the necessity of which was not always apparent;

2. The instability of plans of transportation, according to whether it was decided to give preference to the divisions of the National Guard or of the Regular Army, the organization of one of these bodies being thus sacrificed to that of the other.

It was this *lack of Supreme control* from which the American Army chiefly suffered in 1917. From this lack arose the delays in organization as well as the slowness of the training, and to a certain degree that of transportation, as will appear in what is to follow.

It would be unjust to pass over in silence the participation of the colored population of the United States in the formation of the great American Army.

It is a well known fact that there exist some 12,000,000 Americans of the colored race. Before the war this population furnished 2 Infantry Regiments and 2 Cavalry Regiments, making a total of 10,000 men in the Regular Army. They served in the Island possessions, in the Philippines and Hawaii, and they distinguished themselves in the Spanish-American War of 1898.

The first registration held in 1917, in pursuance of the conscription law, included in the returns 737,628 negroes, representing 8% of the Americans registered. Moreover, the large number of voluntary enlistments bore witness to the eagerness of the colored population to take part in the great European war.

Such a state of mind could not fail to encourage a Government, anxious to rally the entire population, to make appeal to Americans of colored blood.

From 1917 to August, 1918, 277,000 negroes were incorporated in the National Army. They constituted several regiments of Infantry, which General Pershing gladly lent to the French Army, in the midst of which they fought valiantly.

But the great majority of these contingents entered into the composition of numerous spe-

cial units indispensable to the movement and the life of a great modern army.

They were largely employed, and rendered the greatest service, at the bases and on the lines of communication.

II. Material Organization of the Camps. Equipping and Arming the Army

The material installation of the troops which were to be furnished by conscription was provided under conditions for the most part good. If the choice of certain camps was sometimes inspired by considerations other than those based on military necessity, these can be regarded as exceptional cases.

The United States training camps constituted veritable military cities, admirably laid out, and each of them designed to accommodate 41,000 men.⁵

But in spite of the activity displayed in establishing them, it became necessary to postpone the enrolling of the troops two weeks in order that the camps should be ready to receive them. In spite of this, thousands of workmen could still be seen at certain camps, as for example, at Camp Mead, near Washington,

⁵ Namely, one division of 27,000 men together with Corps Troops, Army Troops and Depot Battalions.

completing the cantonments, after the troops had arrived and begun their training.

The total cost of establishing these camps amounted in three months to the sum of \$150,000,000, impressive figures when one remembers that the annual cost of building the Panama Canal never exceeded \$46,000,000. The *American Official Bulletin*, by the way, has published the most varied and complete details regarding the work of organizing these camps,—a work which does the highest honor to American energy and spirit of enterprise.

But even though the required conditions of comfort, hygiene and ample training-ground were all realized, the Army could not be trained without at least a minimum of equipment and armament. Now this minimum did not as yet even exist.

In the month of May the United States had at the disposal of their army 126 batteries, composed of 4 pieces of 3-inch field guns, and eight batteries of 6-inch howitzers. The guns already ordered and in course of manufacture promised to increase the Field Artillery by 136 batteries at the end of a year! But no heavy guns or howitzers had been ordered.

Now upon referring to the programme drawn up for the Regular Army, the National

Guard, and the National Army it was found that 18 field batteries were lacking to the first of these three organizations, 330 batteries to the second, and 432 batteries to the third, making a total deficit of 780 batteries.

There existed, to be sure, certain Coast Artillery capable of being utilized as heavy Artillery of great power if mounted on railroad trucks, or even as army Artillery; but their preparation for such uses would have to be undertaken completely.

Should it be decided to intensify the manufacture of American guns and ammunition or to look elsewhere for better matériel? And in the latter case could this better matériel be manufactured in Europe, or would it be necessary to set up special factories in the United States?

In order to understand the importance of the problem we must form some idea of the enormous consumption of guns and ammunition which marked the battles of 1916 and 1917.

We fought the Battle of the Marne with an average of 400 rounds per gun, at a time when the French war factories were barely producing 13,000 shells per day. In 1918 the American troops alone consumed more than 100,000 shells on certain days of battle. This same

rate of consumption applied to the guns themselves, and in a general way, to all matériels of war. This was in reality a consequence of trench warfare, or to speak more exactly, of modern warfare, which brings into service, both for attack and for defense, all industrial resources.

The necessity of destroying the barbed-wire entanglements before sending forward the Infantry to storm the enemy trenches, had demanded enormous expenditures of shell, supplemented by torpedoes from trench mortars. The destruction of machine-gun shelters, and that of the dug-outs deep enough to be safe from guns of ordinary calibre, led to the development of heavy calibre howitzers and mortars.

Aerial observation, the only means in certain circumstances of regulating the fire on objectives invisible from observing posts on the ground, assumed unexpected developments. Pursuit aviation developed side by side with aerial observation, either through our attacks upon the enemy's patrolling squadrons, or in the course of protecting our own planes from enemy attacks.

Bombing aviation played a steadily increasing part in the fighting, and extended its radius

of action further and further behind the enemy's lines, attacking with bombs of ever increasing power his assembling points, military depots, war manufactories and lines of communication.

For transporting the enormous weights of war matériel, and especially the munitions employed in modern battle, it was necessary to multiply the mileage of tracks and to develop an intricate network of railway lines and automobile transports.

Lastly, to avoid dying of poison before the day of victory, we were forced to answer gas with gas and poison with poison.

All the above demanded a considerable quantity of *matériel*, and a sum total of productive energy even greater.

It was in order to save precious time that as early as the opening days of May, Marshal Joffre had promised that the United States should have the aid of the French war factories, although at that time he could not state precisely to what extent.

His promise was promptly confirmed by the French Government, which offered to the United States five 75mm guns per day, beginning with September, 1917, and two of their 155mm howitzers per day, from the beginning

of October of the same year, with corresponding munitions for normal consumption.

The superiority of French Artillery matériel over all other Field Artillery used during the war, and the preponderant rôle played by the rapid-fire "seventy-five millimeter" field-gun, both for attack and defense, was not only generally recognized, but admitted by our enemies themselves.⁶

The offer of the French Government, transmitted by the High Commissioner of the Republic, at Washington, gave the United States the means of arming their divisions successively upon their debarkation in France. Better still, it assured to the American divisions *their complete allotment of 155mm howitzers even before the French divisions themselves were entirely equipped with this modern weapon.*

Such an example of disinterested collaboration deserves to be recorded, especially when we remember with what anxiety the French General Headquarters were at that time awaiting the delivery of heavy modern armament

⁶ See the secret pamphlet of the German General Staff on the lessons of the Battle of the Somme, issued at the beginning of 1917, in which the French success is in great measure attributed to "the exemplary employment of technical means," and in particular of the Artillery. The contents of this pamphlet were communicated to the American General Staff, and to the Ordnance Department in May, 1917.

and particularly these same 155mm howitzers which, owing to their mobility and power, constituted the indispensable framework of any offensive.

We recall that in 1916, before the offensive of the Somme, when the Commander in Chief enquired of General Foch how many divisions he expected to use, and what front of attack, he replied very justly, "Tell me first how many 155mm howitzers you are going to give me."

The delivery of two 155mm howitzers per day to the American Army was proposed in the common interest of future coöperation, and regardless of the immediate disadvantages to the French forces, and even of the opposition which it might arouse on the part of the French General Headquarters.

But in spite of the unhopd-for advantage of such an agreement, its acceptance by the American Government was neither immediate nor unconditional, and it could not have been otherwise. In point of fact, this proposition placed the War Department in a delicate situation in regard to its own officers, to Congress and to American manufacturers.

It was natural that the pride of American officers who were responsible for the existing Federal armament, had to be considered. It

was no less natural that Congress, which had been called upon for appropriations for the manufacture of American war matériel, should be astonished if at the very outset of the war the War Department should choose different war matériel, and choose it from abroad.

Lastly, the War Department would be running counter to the private interests of the manufacturers, who rightly figured that their own productions would be diminished or retarded by the adoption of war supplies made in France.

It is to the credit of the War Department that it rose above all these considerations of legitimate pride and of private interests, and adopted the matériel whose superiority had been clearly established by experience.

A first programme for the manufacture of guns and munitions, drawn up at the beginning of June for a field army of 1,000,000 men, comprised:

The delivery by France of a *still limited* quantity of 75mm guns;

The manufacture in the United States of 3-inch guns, firing the French "75" shell, to be later transformed into a gun of the Deport type, by the addition of a split spade trail which was at that time under consideration.

The manufacture of 18-pound guns (English model), also firing the French "75" shell, but destined mainly for instruction purposes in the United States.

Accordingly, the American General Staff had from the outset of the month of June welcomed the idea of utilizing all available resources; but, as can be plainly seen, it was still hampered by the desire to construct ordnance that might still bear the stamp "made in America," by incorporating such excellent elements as the French shell, the French variable recoil-brake of Saint-Chamond and the Deport gun-carriage system.

Furthermore, the Chief of Ordnance very justly hesitated to adopt definitively as part of the Artillery equipment a gun whose essential feature, the recoil-brake, remained a secret unknown to him, and of which it was unjustly stated repeatedly that the American factories could never make it.

Undoubtedly it was difficult to make; and even in France there were only a very limited number of specialists capable of making these brakes. But was not this an additional reason for placing them without delay at the disposal of the United States, and aiding the latter to begin manufacturing them? This was pre-

cisely what was proposed to the French Government by its representatives in Washington, — and this was what was done.

From the time of his arrival in Washington, the High Commissioner of the French Republic, M. André Tardieu, occupied himself chiefly in giving the Ordnance Department the benefit of the experience acquired by France during forty years of study and three years of war. He created an armament division and, in agreement with the Secretary of War, assured a close collaboration between the French and American Services.

All the documents and information collected by the French General Staff and by the French Ministry of Armament and of Fabrications of War were placed at the disposal of the Ordnance Department, and included information of a technical or military order, tracings and plans for the manufacture of guns and ammunition, results obtained on the battlefield, consumption, attrition, maintenance at the front, etc. These reports were constantly kept up-to-date, and communicated without delay to the various interested branches of the American Army.

The Ordnance Department, as well as the Department of Military Aeronautics, were

thus enabled to appreciate the main ideas which had directed the formation of the French programmes of manufacture of the successive phases of the war, and draw inspiration from them in establishing their own. They were constantly informed of the needs of the French High Command and of the studies undertaken in France to satisfy these needs.

It was out of these mutual efforts, and in conformity with the directions of the American High Command, that a definite programme of war-fabrication was at last evolved. It consisted essentially in the adoption of matériel in current use in the French Artillery: "75mm" guns, Schneider "155mm" howitzers, Filloux "155mm" long guns.

The American Army did not take long to prove that it knew how to make excellent use of them.

On the other hand, the French houses and companies (Schneider, Forges et Acieries de la Marine), whose manufactures were being constructed or designed in America, sent temporary or permanent commissions, who thus brought the aid of specialists to the Ordnance Department.

After much discussion, the American Government had decided to keep her own infantry

rifle, and also to manufacture a rifle on the English model, transformed to fire the American cartridge. The Government adopted the French auto-gun and machine-gun and the "37mm" gun (while waiting for the delivery in the United States of the Browning model, of recognized excellence) ; also the French 240mm trench mortar, the rifle grenade V.B., and some English mortars (Stokes Model).

In summing up, the essential problem of the choice and of the fabrication of *matériel* for light and heavy field artillery was settled by the assured supply from France, under such conditions that the entrance into line of the American army would not be delayed.

These decisions taken, the United States next undertook to establish and get under way her war industries.

III. American War Industries

Certain delays in manufactures of war gave rise in the United States to a rumor of industrial failure, which cannot be too strongly contradicted.

What should be emphasized at the outset is that the American Government had pledged itself to give priority to the supplies ordered by the British and French Governments and that she kept this promise in spite of serious diffi-

culties, such as the shortage of steel from February to July, 1917, and of transports during the winter of 1917-1918.

Thus at the moment, when the output of the "75" guns was held up by lack of forgings, the Bethlehem Steel Company continued to supply French factories; and during the height of the steel shortage, France received from the United States a daily average of 4130 tons of this metal. In the higher Inter-Allied interests, and in order to keep her word, the United States never hesitated to delay her own manufactures, and to run the risk of criticisms which did not fail to be made.

Conceding all this, it still remains true that American war manufactures suffered certain delays contributable to causes partly of an administrative nature and partly technical.

Small-Arms

These delays did not effect the production of small-arms and the ammunition needed for them. On the contrary, the American factories attained in this regard an output of hitherto unknown proportions.

Beginning with the month of March, 1918, the daily production equaled:

320 machine guns

8000 rifles

1800 pistols

15,000 grenades

11,000,000 cartridges

In October these figures reached:

1400 machine guns

10,000 rifles

3400 pistols

30,000 grenades

16,000,000 cartridges

Artillery Matériel

Unfortunately American industry was less well prepared to manufacture Artillery matériel. The private factories had hitherto made little else than the rough forgings; and the Ordnance Department had at its disposal only a few Arsenals, which were of comparatively little importance and not well equipped.

These Arsenals were immediately developed and specialized:

Watervliet — for the manufacture of guns;

Watertown — for the manufacture of gun-carriages;

Rock Island — for the manufacture of recoil-mechanisms.

Furthermore, the Ordnance Department established near existing factories machine-

shops equipped with the most modern machinery and specialized for the production of some single part.

Thus, for example, the Singer Sewing Machine Factory, at Elizabeth, New Jersey, was equipped with a machine-shop capable of turning out and finishing recoil-mechanisms for the "75" guns at the rate of 20 a day; the Bullard Engineering Company's Machine-Tool Factory at Bridgeport was enlarged with a shop capable of a daily production of 6 "155" G.P.F. guns; and the Dodge Brothers' Automobile Factory at Detroit was equipped for the daily production of 5 recoil-mechanisms for the "155" G.P.F.'s, and 30 brakes for the "155" Schneider howitzers.

Such extreme specialization, permitting the organization of manufactures on a very large scale, offered on the other hand the disadvantage of necessitating long delays in the delivery, assembling and mounting the first parts finished.

In point of fact, serious delays were incurred in connection with the first deliveries; and although at the time of the armistice all the war plants were thoroughly equipped, and the manufacture of the separate parts had everywhere begun, their serial assemblage had not

been really systematized except in the case of the "155's."

The primary cause of delay must be sought in the numerical inadequacy of the technical personnel, and in the defective organization of the Ordnance Department from April, 1917, to February, 1918. Beginning with February that department's administrative reorganization, which we shall have occasion to explain further on, was destined greatly to improve the situation.

At all events, the Ordnance Department, instead of furnishing the raw materials to the manufacturers and giving them orders for the finished articles, personally supervised all the sub-contracts, including the receiving and forwarding to the assembling shops of the separate parts for which the sub-contracts were given.

On the other hand, America's industrial organization and the methods of work in vogue in the United States necessarily involved some initial delays in getting the war manufactures fully started.

The forging, executed much too roughly for the parts that had to be machine-finished, necessitated certain supplemental operations that required a much larger number of machines,

The method of turning out machines consisting wholly of standard parts, not requiring fitting,— a method necessitated in the United States in view of the lack of skilled workmen, — obliged the manufacturers before undertaking the work for which they had contracted to establish machine-shops completely equipped with far more numerous apparatus than is needed in France.

It should be added, however, that the great majority of the factories surmounted all these difficulties, and that American industry plunged boldly into the construction of Artillery materials.

The manufacturers, eagerly seeking information, added their own initiative to what they could learn, and their efforts were crowned with success. Factories of established reputation, such as the Willys-Overland Company, the American Brake Shoe Company, the Dodge Company, the Osgood Company, the Bradley Car Company, the Bullard Company, etc., quickly brought their production up to the required standard.

For the sake of clearness, it should be added that, after a period of experimentating, which might profitably have been shortened, when the

orders were once placed, the first deliveries of the finished articles took place as follows:

The "75" guns, and the Schneider "155's": from 7 to 10 months after the order was placed;

The G.P.F. "155": from 10 to 12 months after they were ordered;

The expected output was rapidly attained in the case of powder, explosives, cartridge cases and even shrapnel, the production of which had reached the figure of 30,000, beginning with the month of March, 1918.

On the other hand, long delays were necessary to perfect the manufacture of high explosive shells, the adoption of which had necessarily followed that of other French equipment. In point of fact, it was not until November, 1918, that the programme was fulfilled of turning out 100,000 explosive shells per day, for the "75" guns.

We should also note the great effort made by America to extend the use of mechanical traction, and particularly that of the caterpillar tractors. At the time of the armistice, her machine-shops were turning out every month more than 1200 five, ten and twenty-ton caterpillar tractors.

At the same time that it started the manu-

facture of the Renault assaulting tanks, the Ordnance Department, in conjunction with the Ford Motor Company, was planning a light tank that could be used either for attacking or as a Field Artillery tractor. A few sample tanks were built, and the Ford machine-shops were equipped for the production of 100 tanks per day, when the armistice was signed.

It should be noted here that the Ford factories which, before America entered the war were turning out automobiles at the rate of 3600 a day, equipped themselves for the manufacture of gun-carriages, submarine chasers and liberty motors, complete or in parts,— and more particularly, cylinders for this motor at the rate of 4000 a day.

Aviation

It should be said, however (while speaking of the liberty motor), that the high hopes entertained by the American people of an abundant and rapid production of airplanes and equipment were doomed to disappointment. The Allies, and France in particular, had need of the raw materials and the detached parts which American manufacturers were furnishing them. Hence *the Allies did not encourage* the United States to adopt the models which had

already proved their worth at the front. Consequently, America sought to produce a motor and a plane that would lend themselves to the American method of manufacture in standard parts.

After much discussion and research their efforts centred in the liberty motor, and the De Haviland aeroplane. But this motor had not yet been perfected, and it was found necessary to increase its power and lessen its weight. Consequently it was not until the end of 1918 that its production reached the imposing figure of 5000 a month. Unfortunately the De Haviland aeroplane had not undergone modifications corresponding to those of the motor that it was destined to receive.

The result of all these gropings and delays was that the American Aviation Service was forced to go into battle in 1918 equipped with French apparatus, and without being able to make the maximum use of the excellent and numerous personnel that it had succeeded in training, both in the United States and in Europe.

To sum up: the results as a whole that are shown by an impartial examination of the American war industries, absolutely give the lie to the report of an industrial breakdown in

the United States. At the same time we may draw from this industrial effort of America a conclusion and a lesson:

America was able to develop rapidly the lines of production that were familiar to her manufacturers, such as small-arms, powder and cartridges, tractors, etc. But in spite of the knowledge of her engineers, the fidelity and skill of her mechanics, the perfection and power of her factories, it was only in the face of great difficulties, and often after serious delay, that she was able to perfect the manufacture of our ammunitions and weapons of war.

Inventions are made only with great difficulty during the war. The technical mobilization, equally with the industrial mobilization of any country, ought to be completely prepared for in times of peace.

IV. Training the Army

The American Army was called upon to measure itself against a redoubtable adversary, trained to war through a long preparation in times of peace, and by three years of uninterrupted fighting.

Hence it was with good reason that the American General Staff emphasized, at the beginning of the month of June, the importance

of training, and the gravity of the problem it offered. Unfortunately they did not possess all the means essential to solving it by themselves; but at least they had the merit of attempting to do so.

Difficulties of every sort presented themselves, either simultaneously or one after another:

The formidable task of enlarging the Army;

The absence of any systematic military preparation;

The remoteness of the field of battle;

The special character of the last wars in which America had taken part;

The insufficiency or absence of up-to-date training schools;

The scarcity, if not the total lack, of certain essential equipment for training;

The limited authority of the General Staff, and its numerical insufficiency.

It would have been desirable to organize the training, or at least so it seemed to us, on the following basis:

In the first place, in order to make sure of reaching the desired goal, it was necessary to establish the conditions to be attained, namely: training of the Commanding Officers of the large units and their Staffs, and of line officers,

from the Chief of Platoon up to the battalion Commander, of the Special Services, and of the troops themselves.

Next it was necessary in the general form thus drawn up, to determine what part should be assigned to the training in the United States, and what part to the training in France, taking as a basis the plans already made for the organization and transportation of the large units. Lastly, this programme being once established, it remained to secure the means of carrying it out, namely:

A strong and enlightened directing board at Washington acting in accordance with General Pershing's directions; the equipment of the units and training schools with training material;

The judicious employment of foreign advisors and methods.

The first part, that is to say, the general plan, was drawn up; but the indefiniteness of the transportation schedules and the frequent hitches which occurred in the organization of the Army, introduced an element of permanent disturbance in the programme that was to be carried out in America.

The directing organism was soon created under the name of *Training Committee*, Gen-

eral Pershing recommended to this Committee that it should keep in close touch with his General Staff, and include in its number a few foreign advising officers.

But as a matter of fact this committee played through several months a merely nominal rôle in the training of the American forces, because it lacked that *effective authority* which could have been given to it only by the proposed reform of the General Staff, and by the presence among its members of officers who had served at the front.

Before considering the training of the army, it was necessary to officer it, and to prepare instructors.

The resources offered by the Regular Army were notably insufficient even if a heavy drain was made upon it for officers. And where, indeed, were to be found the 2000 officers needed at once for the Engineer Corps, the 3500 demanded by the Artillery, without counting the tens of thousands of officers indispensable for the Infantry of the new army?

In April, 1917, the sum total of officers in the American Army was only 9570. By December, 1918, it was destined to have risen to 183,000.

France, in time of peace, had officers enough

to satisfy the needs of both active and territorial armies calculated on a basis of her total mobilized strength; yet during the years from 1914 to 1917 she was obliged to commission no less than 100,000 officers, drawn from the ranks of the privates and non-commissioned officers. The wearing out, the losses and the men required for new services in such a war, surpassed all provision.

In order to be ready for such needs, and such rate of consumption, the Secretary of War as early as the month of April, 1917, attacked the problem resolutely. He decided to train without delay a new corps of officers in series averaging between 30,000 and 40,000 men, drawing from the Universities, from business, from the factories, from each and every class of society the boys and young men who represented the vital forces of the nation.

The first thing was to give them mentality, the spirit of discipline and a preliminary general military training, which every officer worthy of the name ought to possess. Such was to be the essential aim of the "Training Camps for Reserve Officers."

Following this preliminary training there were to be higher courses, either special or general as the case might be, conducted in Officers'

Schools, either in the United States or in France, and by means of a period of training at the front.

The idea was good; and the method, if well applied, seemed excellent. Unfortunately it was not within the power of the Secretary of War to remove all the difficulties which hampered its success. But at least he did his best to remedy the difficulties as they arose in actual experience, or when they were frankly explained to him. Thus it was that each new series of courses marked an important progress over the preceding, and that little by little, the Doctrine of Warfare and methods of training were established in the United States as they had been in the other armies of the Entente.

The first series of courses, from May 15th to August 11th comprised 4000 pupils.

The training was given with infinite conscientiousness by Regular Army officers, who lacked experience in modern warfare, without the aid of any foreign adviser and in pursuance of regulations not yet revised. Such instruction naturally remained quite imperfect.

In the course of it the most scrupulous application was made of pre-wartime regulations, with the dominant idea, highly to be approved, of inculcating in young officers the spirit of

discipline and sacrifice. But in the application of this right idea, these inexperienced teachers often overstepped the end they purposed to attain.

By assigning to combat too restrained a part and, within that restrained part studying combat with the armament of other days, they ran great danger either of giving their pupils false ideas, or of shaking the confidence of the better informed.

They failed to recognize in practice the formidable power of Infantry and Artillery fire, and the imperious necessity of coöperation and of observation on the battlefield.

In a word, they forgot that discipline is not only the result of exercise in close ranks, but that it can equally be acquired in the course of combat exercises in open order, rigorously exercised. It is the eternal confusion, which we have all known, between the *end* and the *means*.

The pupils themselves had the impression that this instruction was not up-to-date; and we repeat, that their confidence might well have been shaken if it had been of a less robust sort.

They eagerly questioned the officers of the Allied armies whom they met during their hours of leisure. They read whatever was published on the war, and often expressed astonish-

ment at not finding in these publications what had been taught them the day before.

With these reservations the bearing, the zeal, the progress of these young men called forth general admiration. Neither heat nor rain nor cold could stop them. An enormous sum of work was demanded of them, and they were constantly ready to give more than they were asked. The magnificent spirit of these reserve officer students had a decided influence on the new army.

If, thanks to intensive training, and to the spirit which animated both instructors and pupils, the task was accomplished of giving to the latter a general military training, it was, on the other hand, impossible in these camps to prepare officers intended for special branches, owing to the lack of equipment, firing grounds, qualified instructors and time.

In point of fact, there were young men soon to receive commissions as Artillery officers, who had never yet fired a gun. For these reasons it was all the more essential to have them trained without delay in special schools. But the organization and functioning of such schools again brought up the question of employing foreign officers, in regard to which, as early as the month of May, Marshal Joffre,

and later the French Government itself, had unsuccessfully urged the General Staff and Government of the United States to decide favorably.

The arrival in July of General Pershing's recommendations, together with decisions taken by the Secretary of War in accord with the French High Commissioner at Washington, fortunately abridged the long pending negotiations. Had they lasted much longer, they must inevitably have produced the false impression that the training of the American Army was being retarded by those whose duty it was to urge it forward.

General Pershing, understanding the past and divining the future, laid down as a dogma that success in this war depended chiefly on the training of the Staff. And in consequence it was imperative to prepare Staff officers in great numbers for their essential functions. At the same time, knowing the value of the lesson to be learned at the front, and the facilities offered in France for organizing and directing the training of the army, General Pershing insistently demanded the sending over of a large number of officers for all branches of the Service.

Lastly,— and this recommendation was des-

tined to remove all doubts and satisfy the prevailing opinion in the American Army and among the great majority of its officers — *he specifically demanded the employment of British and French officers for teaching the special features of trench warfare.*

Having in mind, undoubtedly, the aptitudes that he had personally observed in the two Allied armies, he specified that the teaching of the following subjects should be respectively entrusted:

To the French, the teaching of Artillery, the grenade, the machine rifle, field fortification and liaison duties;

To the English, instruction in the use of the machine-gun, in "sniping," trench mortars, the bayonet and poison gas.

General Pershing's judgment may be compared to the vastly too flattering declaration that General Bridges made regarding the French, to the representatives of the American press on April 24th, 1917, when he said of them: "Naturally they are our superiors. Put a French soldier into the trenches, and he will begin to dig up the soil and attend to his other duties as if he had been trained to them all his life. Our own men are excellent and well disciplined, but they have not the same

inborn vocation for it that the French have. You also will find that you have a great deal to learn, a great many things that no one outside of the French will be able to teach you."

General Bridges will pardon a Frenchman for refusing to share his opinion in its entirety. We French and English learned a great deal from each other, and in such a war there was always a great deal to be learned *from each other*, quite as much by the French from the English as by the English from the French.

In point of fact, in the great task of Inter-Allied collaboration, the English and the French have both furnished, as regards both the organization and the training of the American Army, an example of moral union which, coupled with material union, has constituted their strength throughout the war.

And this collaboration does honor both to the eminent men who instituted it, and those who have been its modest artisans, sincere and devoted, in all the branches of military activity: General Staff, Training, Organization, Armament, Transportation. . . .

What General Bridges doubtless meant to say was, that the collaboration of the French was, by the very force of circumstances, destined to assume a special importance.

The American Army was actually coming to fight in France, in the midst of the French Armies, in contact with the French nation, utilizing for its bases and lines of communication the territory and railways of France; and for its camps, schools and military establishments, also those of France.

It was France that was destined to furnish to America the largest part of her war material during the lapse of time indispensable to the organization and putting in running order of her industries of war,— and practically until the signing of the armistice.

Thanks to their previous studies and labors, both before and during the war, the French General Staff were able to save America from many gropings and errors, from heavy losses in men and in money: that is, from the heavy price paid for experience.

However, did not this collaboration tend to strengthen the knots that bind us to the past?

That is why, in place of the timid collaboration of thirteen French officers proposed by the War College to Marshal Joffre in May, 1917, General Pershing recommended that a hundred and sixty-five should be called, together with the same number of British offi-

cers, supplemented respectively by the same number of non-commissioned officers.

It is very interesting to observe that this recommendation practically reproduced the propositions made in the month of April, 1917, by the head of a small American Military Mission in Paris, propositions to which no attention had been paid, because of the bad organization of the General Staff already mentioned, and the state of mind of a certain military circle.

It may be seen from this that there have always been on the American General Staff certain officers, and those among the best, perfectly informed as to the needs of their army, ambitious for the future of its new-born strength, and animated by the desire to carry its training to a very high point by utilizing the experience of their friends and allies. But it is equally plain to see what stubborn resistance was offered within the narrow military circle, to which we have referred, to the idea of invoking the aid of the experience of foreigners.

The task of the French High Commissioner was to overcome this resistance; and he received from Secretary Baker the most sincere support. At the very moment when General

Pershing's recommendations arrived in Washington, he had at last induced the American Government to accept at least the coöperation of 24 officers, who for more than a month had been awaiting in France the authorization to embark.

The valuable work of the British and French advisers made itself felt in every branch of the Army. It was coördinated and directed, so far as French collaboration was concerned, by the High Commissioner of the Republic, M. André Tardieu. And we shall not hesitate to say that, in following his formal instructions, these officers always expressed the opinion or desire of the Government and General Staff of France, to the exclusion of all personal opinions.

The British Commission acted in accordance with the same spirit, or to speak more accurately, the two Commissions mutually devoted themselves with all their strength and with all their heart to the accomplishment of a task that might spare their brothers at arms the harshest lessons of experience.

At the end of the first course of instruction, 27,341 reserve officers were appointed.

At the close of the second course, which had the services of a few foreign officers as special

instructors, from August to November, 1917, 18,000 received commissions, and of these 2,000 were sent to France.

In July the Artillery School at Fort Sill was at last reorganized and opened. The American General Staff requested the services of four French Artillery officers as special instructors there, and opened a series of courses for the benefit of a steadily increasing number of officers.

Side by side with the School of Artillery, a School of Infantry was organized, in order to complete the training of young officers in the use of special arms.

At Washington the War College endeavored, through a course of intensive training, to initiate into their special duties a certain number of the Staff officers of the National Guard.

Lastly, the training of the troops themselves was undertaken in accordance with a sixteen weeks' programme established by the General Staff, the training of the divisions began in the camps as fast as they were occupied by the new units.

In each of these divisional camps the British and French advisors, grouped according to their different specialties, placed themselves at the disposition of the American Commanders.

Unfortunately the necessary equipment for training and armament was lacking, and some of the camps could be seen using cannon and machine-guns made of wood, and hand grenades made of clay, remarkable for their ingenuity, but productive of feeble results.

Furthermore, since the camps were not completed it was necessary to employ part of the troops in the work of construction and drainage.

Constant transfers, due to the creation of special units or to the necessity of bringing up departing units to their full strength at a day's notice,—the result of not having figured in the first place on a wide enough margin,—deprived the officers of their men, and the men of their officers, and disorganized the training from the outset. Sometimes a division which had made excellent headway in its training received at its departure 30% of new recruits, which radically changed its degree of preparation for battle. It required months to remedy, *even partially*, a state of affairs which the executive officers deplored.

On the other hand, the General Staff's programme of sixteen-weeks' training, even when enlarged and supplemented by later circulars, was at best only a time schedule. It taught

no theory of combat, because the General Staff was too far away from the battle front to feel that it had the right to establish such a theory; and undoubtedly there was not a person in Washington who would have dared to attempt it. Hence the American officers were deluged by the flood of English and French regulations sent them, by notices of every sort, some of which agreed and some of which did not agree with the American regulations. They constituted a library for times of peace, and not a practical manual for war. This absence of guidance created uncertainty and confusion, and induced a large number of officers, ambitious to do well, to create their private methods of training the men in their own units.

The disadvantages were aggravated by the fact that the foreign advisers, *assigned to teach certain specialties, were not qualified to teach anything else.* They did their best to co-ordinate these specialties, to give them their proper place in the scheme of modern combat, but the result of their efforts depended solely upon the disposition and state of mind of each division Commander.

Notwithstanding these difficulties, and despite all errors of execution, so much hard

work had been done, that the year 1917 was fruitful in results.

On November 19th, 1917, the Secretary of War was able to say:

“The training of our National Army is now making rapid progress. In all the camps the morale of our citizen soldiers is now excellent.

“The men called upon to defend our country under existing conditions are applying themselves to the work with a serious spirit and high purpose that promise the best of results.

“The French and English officers assigned to aid in the training of our new army are arriving. They have come to initiate our men into the latest developments of modern warfare, so that our troops may forthwith adopt the most efficacious methods of instruction, to avoid loss of time and of human lives.

“In France, the training of our troops is being conducted with the same care. In the sector where they are now in the trenches, they are showing themselves worthy of the best traditions of our army.”

The new corps of officers were animated with a splendid spirit. These men, snatched but yesterday from their business life, burdened with responsibilities which they would

resume in the near future, worked with an ardor that has not been surpassed in any army in the world.

Through their own lofty conception of duty, they were able to impress the same conception upon their men. It should be added that officers and men alike were absolutely confident of victory. In default of a complete military education, they carried in their hearts that high ideal that has formed the basis of America's strength, that wherever the flag of the United States is borne, victory must be achieved at any cost!

They meant to go to Berlin, and they would have gone there, if the capitulation of Germany had not stopped them in the full tide of victory.

V. The Plan for Transportation

As we have already seen, the problem of transportation affected, rightly or wrongly, every decision taken at Washington. This should not be a source of surprise, since it has influenced every decision taken in the course of the war by any of the Entente Powers.

The transportation of the American Army was intimately involved in the general problem of trans-oceanic service on behalf of the Allies, since the latter were dependent for prosecuting

the war upon the aid furnished by America, and quite as much upon the food supplies as upon the raw materials and certain manufactured articles. Hence, it was the general problem of transportation which needed to be worked out by the Allied and Associated Governments, and their solution should have formed the basis for deciding the means of transporting the American Army.

But, on the one hand, the Allies could not make up their minds to attack this general problem. On the other hand, the American Government or American General Staff persisted in their determination to solve unaided a problem that was too big for them.

The experience gained in transporting the First Division was not a solution. It was merely negative. The War Department, having only a paltry tonnage at its disposal, had to proceed with two convoys utilizing the same transports. The transportation was effected between June and August, one month behind the schedule. At this rate, as the American General Staff perceived, it would have taken seven years to convoy the army across!

Meanwhile the War College had been studying the problem, and in the early days of June had already worked out a plan which, while

still capable of revision and improvement, came pretty near to being the true solution. It was based upon the employment of tonnage amounting to 900,000 tons for the month of August, 1917, rising to a monthly rate of 1,500,000 in April, and dropping to 975,000 from August, 1918, onward, for the transportation of a million men and their maintenance.

In the calculations which the Allied General Staffs had made on their own behalf, they arrived at similar figures, but if anything a little higher.

In any case these studies had a merely academic value, since they were neither based on a common understanding nor susceptible of immediate execution by the Governments concerned.

The moment had not yet come when Germany, throwing all her forces into the last battle, would oblige the Allies to throw in all of theirs, and to this end apply unreservedly the fruitful principle of *equal coöperation on sea and land*.

Up to the month of March, 1918, the United States, refusing to make an *effective* requisition of her merchant marine, had at her disposal a tonnage notoriously insufficient for

carrying out the plan proposed by General Pershing.

The months passed . . . and at the end of six months only four fighting divisions, and certain army troops and services, had been transported.

Meanwhile the German forces were multiplying on the Western front. It was felt that the storm was brewing, and it was asked in alarm whether the American Army was going to be in time for the battle of 1918. Already for some time it had been quite certain that the American Army would not be in time for the spring campaign.

Evidently the problem of tonnage was the foremost question of the hour. It was discussed both in official and non-official circles, but only for the purpose of deploring it; and no practical solution resulted from these purely negative arguments.

Many vast ship-yards were swarming with activity, rushing forward the construction of the fleet of the future,— but this fleet could not possibly be made ready by the spring of 1918.

The truth was that no one dared to face frankly and resolutely the problem which occupied the thoughts of everybody, without a single person arising who seemed qualified to

solve it, notwithstanding that it was the biggest problem of the war.

We recall that during the winter of 1917-18 at Washington, one of the most distinguished general officers of the American Army, who well deserved to be called "the father of the new army," expressed himself as follows: "I am turning over to you here this army of a million men, organized and trained as you wish it to be. What are you going to do with it? There are no vessels to take it across."

Since the study of the problem of transportation had not yet been attacked by the nations in common, there was only one answer to make: namely, that a *difficult* problem is not necessarily an *insoluble* problem, and that there must be a solution for this one. Surely, the President of the United States would not have approved a military plan, without regard for the possibility of its execution, and more specifically the possibilities of transportation.

But we repeat that it was a problem which had to be worked out in common, with the firm resolve to solve it, even at the cost of privations and suffering, even though it hurt private interests and wounded individual pride. But, in this as in many other things, before we could all be brought to agree upon the application

of the principle, it required the intervention of another: the Enemy! That was what happened in 1918.

VI. Great Administrative Reforms

We have seen how cumbersome and complicated the central military administration was, incapable of prompt decisions and without effective control over their execution.

The reforms required were too profound to be the work of a single day; but at least they were the work of a single man.

The Secretary of War has often been reproached for not having accomplished these reforms earlier. But we should not forget the circumstances under which these reforms had to be conceived, studied and applied.

The country was at war. Good or bad, the central organization was in operation, and its task had very soon assumed unforeseen proportions. It was certainly not easy to accomplish profound modifications in the full swing of intensive work, and to replace, not only the old administration and its methods, but also the men who had in their hands the work of preparing the country for war.

Consequently we should not be too ready to criticise. Let us bear in mind that the most

desirable reforms, those that were most obviously demanded in Europe, were often accomplished only thanks to the enemy: that the unity of command was the happy consequence of the German offensive of March, 1918, and that we Frenchmen could not have done nearly such big things if the enemy had not been within eighty kilometres of Paris!

The complete reorganization of the War Department was the result of a series of resolutions taken in the course of the winter of 1917-18, and more particularly the period extending from December 15th to February 15th.

They found practical expression in the establishment of a War Council, and the reorganization of the Ordnance Department on a new basis, in the reorganization of the Quartermaster Corps, and above all in the complete reform of the General Staff, on February 7th, 1918, which covers all the others.

The creation of a War Council on December 20th satisfied the public demand for a coördination of the efforts of the different branches included in the War Department.

In point of fact, the chief effect of this measure was to make it possible to replace certain department heads, especially in view of the fact that in the complete recasting of the Gen-

eral Staff, accomplished six weeks later, this War Council was destined to play only a secondary rôle under the Chief of Staff, whom it was supposed to aid in his tasks. The reorganization of the Ordnance Department had an entirely different significance. For the first time the technical services and those of administration were definitely separated from the producing services; and a rational method was to be followed in establishing the programmes for materials and munitions.

The *Administrative Office* or *Central Bureau* had charge of these.

The *Engineering Bureau* next inspected them from the technical point of view, and passed them on to the *Procurement Division*.

The duty of this division was to place the orders of fabrication; and that of the *Production Division* was to assure their execution. The *Inspection Division* received the finished materials (guns, munitions, etc.), and the *Supply Division* distributed them.

The heads of these several departments were either Regular Army officers or business men, according as their respective duties involved questions of ordering and accepting, or merely of inspection and production.

In view of the necessary relations which the

Ordnance Department must hold with the corresponding services of the French General Staff, the Secretary of War, in accord with the High Commissioner of the French Republic had prescribed the establishment of a constant and trustworthy reciprocal liaison.

By the spring of 1918 the Ordnance Department was well organized and well informed, and thoroughly equipped to perform its duties under satisfactory conditions.

Complaints had been expressed on the subject of lack of clothing for the American divisions, and of irregularities committed in the acceptance of contracts (which it was claimed were given exclusively to a favored number of manufacturers, and often at exorbitant rates). These incriminations resulted in reorganizing the Quartermaster Department, which corresponds more less closely to the French *Service de l'Intendance*.

The Quartermaster Corps was divided from now on into three departments: the first had charge of financial questions; the second of the purchases of clothing, equipment and supplies of provisions and forage; the third, of transportation.

These reorganized departments, as well as the newly created "Purchasing Division,"

formed part of the general reorganization of the General Staff, which is to be outlined below.

The order for the reorganization of the General Staff, signed February 7th, put an end to the long discussions and the numerous projects of reform studied with infinite care by the successive Presidents of the War College. It may be summed up as follows:

(a) The Chief of Staff, assisted by the War Council, became really the responsible Chief of the Army, and the immediate adviser of the Secretary of War upon all matters relating to the military establishment. He received powers of supervision and of coördination which he had never previously had.

This at last remedied the lack of a High Command, which General Scott had already pointed out when relinquishing his duties as Chief of Staff, and which had heavily handicapped the United States in her new military organizations undertaken for war.

(b) The General Staff, which hitherto had played only the rôle of counsellor, called upon to make recommendations without even being informed in many cases to what extent they had been followed, henceforth was to take an effective part in administration. It was sub-

divided, to facilitate the work, into five divisions, each having at its head a Chief responsible for his particular service, with the title of Assistant to the Chief of Staff.

1. The First Division, or "Executive Division," was in reality a sort of military cabinet for the Chief of Staff, having the function of coördinating and controlling the action of the other divisions. Its Chief should act for the Chief of Staff or the Acting Chief of Staff during their respective absences.

2. The "War Plans Division" charged with the investigation of the general organization of the Army, the projects for National Defense, and the development of methods of training, was constituted by the War College, whose rôle thus found itself defined by this new organization.

3. The "Purchase and Supply Division" merely sanctioned the existence of the Service previously constituted under the Chief of Staff for the purpose of supervising and directing all the contracts approved by the various departments of the Army.

4. The "Storage and Traffic Division," in which was merged the "Embarkation Division," created in 1917; this division was charged with all the transportation of troops

as well as of all munitions and other supplies for the Army both on land and sea, with extensive powers of control. Its duties assumed the dimensions of an enormous task.

5. Lastly, the "Army Operations Division," under the orders of a Director of Operations, superintended the recruiting, mobilization and plans of transportation.

In order to remedy the excessive centralization which has often paralyzed the action of the War Department and has given rise to criticisms, sometimes justifiable, the Secretary of War and the Chief of Staff himself delegated a portion of their powers to the Division Heads. The latter were henceforward authorized to issue to their own Services all orders or instructions proceeding logically from the orders they themselves had received.

There was no mention made in this new organization either of the Adjutant General or of the Director of Instruction: since the existence of the first had never ceased to create an unfortunate duplication of the rôle of Chief of Staff; while the recent creation of the second had fallen far short of procuring the advantages expected. Apparently, in order to remedy a bad institution, in pursuance of which the authority of the Adjutant General

was too often exerted at the expense of that of the Chief of Staff, if not in opposition to him, it had been decided to reduce quietly and without change of law the rôle of the former to what it ought to be, thus securing to the Chief of Staff the power he ought always to have had.

These important reforms, which were to be completed by others in the course of 1918, represented a considerable progress over the past. The sound principles of every military organization had been here embodied. It still remained to apply them, and no matter how the problem was faced, they were always driven back to the inevitable necessity of finding a real Chief of Staff.

But Mr. Baker had already discovered the man who, next to himself, would be of the right dimensions to draw with him irresistibly into action all the half-hearted and the obstructionists, and he had decided in advance to place him at the head of the newly created General Staff.

General Peyton C. March, who had for five months commanded the Artillery of the Expeditionary Force in France, was then on his way back to Washington. At the request of Secretary Baker, and in the higher interest of

the Army, General Pershing had consented to let him go.

It would be unfair to terminate this account of the effort of military preparation accomplished in the United States, without mentioning the aid spontaneously offered to the American Government by the most eminent minds and distinguished personalities in science, industry and commerce. All these men abandoned their personal affairs with fine disinterestedness in order to devote themselves to those of their country. We encountered them on numerous committees then working in close relation with the administrative departments, constantly searching to augment the sum of their useful information, and always ready to welcome suggestions that might be helpful.

Their action had a direct influence upon the public frame of mind, which was becoming steadily more inflamed over the problems of the war; and it was possible to watch the birth of a new public spirit that fully justified the declaration of President Wilson:

“It is not an army we must shape and train for war, it is a nation!”

CHAPTER IV

THE PREPARATION IN FRANCE

General Pershing had no sooner arrived in France than he found himself confronted by a task so great that it might well have been anxiously asked how he would succeed in accomplishing it. He was destined to work in a perpetual atmosphere of battle, without knowing either how much time or how many troops he would have at his disposal — so largely did the future of the American Army still remain an unknown quantity. General Pershing himself had to decide on the data of the problem, at a time when the essential means to solve it, the men, the matériel and the ships, were not to be had.

Kitchener had ample time, from the outset of 1915, to organize his armies in England, and put them in readiness for the battle of the Somme, on July 1st, 1916. Yet those armies passed through a harsh apprenticeship during the opening days of the offensive. He had at his command for building them up, established means of organization and training, factories fully running, officers and non-commissioned

officers trained by war, and a method of warfare tested by experience. The transport of the armies across the Channel was assured, and their employment by the Staff of the British Army, at the front since 1914, was relatively easy.

General Pershing had many more difficulties to overcome, as everything was lacking at one and the same time, and he himself was thousands of miles away from his base. It was no part of his task to organize the embarkation ports in the United States, or the trans-atlantic line of communication; but he undertook at once the development of the ports of debarkation in France, and the lines of railroad communication from these ports towards his future sector of battle, at the same time that he was working out the general plan, which Washington awaited from him.

But for the successful accomplishment of this work, on which would depend the future of the American Army, he was assisted by a Staff still far too small, while the officers composing it still had everything to learn regarding the European war. In judging his work, it is necessary to bear constantly in mind the almost incompatible conditions under which he was obliged to plan, decide and act.

The uncertainty which still involved the final plans of the United States Government, and more especially threatened the chances of carrying them out, rendered the necessary collaboration with the Allied Staffs a very delicate matter.

The latter, accustomed for three years to draw up periodically the balance sheet of the belligerent forces, to serve as a basis for the decisions of the Allied High Command in the choice of its plan of action, wished to know definitely what American forces would be available. Such knowledge was all the more essential to them because of the necessity of making provisions for the debarkation and land transportation of the troops and supplies of the American Army, without interrupting their own. General Pershing could not supply the statements, for although he knew quite well what he needed, he was not yet at all sure what could be furnished him.

The calling of recruits, the problems of equipment and of tonnage were not within his control; and as for the rest, even when it was decided at Washington to satisfy all his desires, they did not fail, at the same time, to call attention to the fact that his "recommendations" were not orders!

On the other hand, the ignorance in which the Staff officers and, more generally speaking, the Allied and Associated nations as a whole had lived in regard to one another, was not of a nature to remove difficulties. The only thing which does not change, and very happily cannot be changed, even in war, is the national character of each people. At the same time, it is essential between Allies to have a thorough mutual understanding, if they are to avoid offending one another's national pride through ignorance. How many misunderstandings and errors might easily arise for no other reason than that America and France lacked mutual acquaintance and understanding!

Let us have the courage to admit that such misunderstandings and such mistakes did occur. But it must be added that they never lessened the activity, the willingness and the energy employed in the pursuit of a common ideal. In war-time, things apparently most simple become difficult; and it is the first step in good warfare to surmount difficulties as they arise, either at the rear or at the front.

It was to conquer these difficulties that the energy and the tenacity of General Pershing were employed during the eight months at his

command, from July, 1917, to March, 1918. At the beginning he installed himself in Paris, in close contact with the chief Services with which he would have to conduct his business, and there he organized his Staff. Meanwhile, he himself visited the front in order to form his personal opinion regarding the military situation, and the respective conditions of the armies actively engaged.

In September, 1917, he definitely established his General Headquarters at Chaumont, behind that sector of the front which was destined to belong eventually to his army. This decision, based, no doubt, on serious considerations of a military order, removed his Staff and his Services too far from the corresponding branches of the Allied armies. Some form of permanent connection was imperative. The means adopted to secure such connection was not perhaps the best possible, but some form had to be adopted, and this is not the place to discuss it.

The French Commander in Chief detailed a Commission at Chaumont, to work at the disposition of the American Staff, but which had no connection with the other French Services called upon to render assistance to the American Army — in other words, the Services of

the Interior (Ministry of War, Ministry of Munitions, etc.), nor with the Commission of Information at Washington. Whatever services were rendered by the French Commission at Chaumont to the Army of the United States — services loyally recognized and appreciated by the American Staff — it was not qualified to coördinate the other Departments concerned in the organization and formation of this army, both in the United States and in France. An attempt had been made to achieve such conditions for all Administrative business resulting from the presence of American troops in France. In December, 1917, M. Clemenceau had created the Central Office of Franco-American Affairs, and attached it to the "Presidence du Conseil," thanks to which all the administrative affairs were handled, when involving litigation, by men who had had experience in both countries. Its Chief, M. Ganne, had worked for ten months in America, and in conjunction with Americans.

But at the moment when the arrival of the troops increased the importance of the questions to be settled, it seemed to the French Premier:

1. That coördinating authority should be extended in France to all organizations;

2. That this same coördinating authority should also direct the coöperation of France and America in the United States;

3. That in order to realize these two conditions, the coördinating authority should be exercised *by the Government itself through one of its own members.*

Then it was that M. Clemenceau, zealous partisan of unity of control in the work of coöperation as well as in the conduct of a battle, entrusted M. André Tardieu, High Commissioner of the Republic at Washington, with the higher functions of General Commissioner of Franco-American Affairs of War at Paris.

From this moment, even if all difficulties were not fully overcome, they were at least greatly simplified. But up to this time good will, industry, perseverance, and sense of duty on the part of both the French and American Staffs, had made up for defects of the organization in which their productive activity was exercised.

The debarkation of the American Army was effected, as had been arranged, at the ports of Brest, Saint-Nazaire, Nantes, La Pallice and Bordeaux. But these five ports offered at the outset possibilities for the landing of not more than 10,000 tons a day. Extensive improve-

ments were required to raise this figure to 60,000 tons, to meet the needs of a million men. The American General Staff undertook these without delay.

From these ports or maritime bases, two lines of communication were established leading to the army zone:

The northern line, following the itinerary of Saint-Nazaire, Nantes, Tours, Bourges, Nevers, Dijon and Is-sur-Tille, with a branch line running from Brest to Tours *via* Le Mans, and another from La Pallice to Saumur *via* Niort;

The southern line, following the Bordeaux-Limoges route, joined the northern line at Bourges.

It had been provided, in case the Bourges-Nevers-Dijon line should not suffice for the traffic, that a part of it could be transferred to the Bourges-Auxerre-Chaumont line, and hence over the line running through Tours, Orléans, Troyes and Chaumont.

A plan for work destined to increase the capacity of the French railway lines required for lines of communication for the American Army, was worked out and promptly put into effect.

At the start the chief difficulties arose from

a lack of rolling stock, worn out by three and a half years of war, and from the small force of railway men already overworked. General Pershing did not fail, as early as the month of July, 1917, to call the attention of his Government to these conditions, and to request the working force and the railway material which he judged it essential to obtain from America.

For that matter, the organization of the first railway regiments had been undertaken on the advice of Marshal Joffre, and their despatch to France stood at the head of the list in the order of priority of transportation.

Along the lines of communication General Pershing caused important dépôts to be constructed, especially in the centre of France, at Tours, Bourges and Nevers, in which to maintain a three-months' supply of food for the entire force landed in France.

This general plan answered perfectly to all existing needs, and had all the desirable elasticity to meet the future requirements of the Expeditionary forces.

The direction of this Expeditionary force was assured by a staff that was steadily becoming better and better prepared for the task which the very near future held in reserve for it.

After having established his general Headquarters at Chaumont, General Pershing, facing the problem to be solved in both its aspects, that of the front and that of the rear, separated his General Headquarters into two groups.

At Chaumont he maintained his General Staff properly so-called, with a representative of each of the Services.

At Tours he grouped all those Services whose activities are behind the front, in proximity to the organizations in connection with which they would be called upon to act directly.

Those who visited the American Staff in the month of March, 1918, will recall having met there a large number of distinguished officers accomplishing enormous tasks, although still hampered by the extent and novelty of the problems they were daily called upon to solve.

The problem of training engrossed them beyond all else. It was inseparable from the question of employing the troops in action; and it was only natural to wonder whether the American Staff would not prefer to wait until the year 1918 in order to bring into action a first army of some 15 divisions capable of playing a big part from the moment of its appearance at the front.

Although at first sight this was of a nature

to flatter national pride, it would have been a dangerous decision. For the training of a unit intended for offensive battle could not be considered satisfactory in a war like this one, unless it had been previously war-hardened by an interval of training at the front. Accordingly, it was decided that the American Army was to enter action *progressively*, and *not as a whole*.

Such was General Pershing's decision, and as early as the end of the summer of 1917 he adopted the true formula capable of shortening as much as possible the period of his army's preparation behind the front. The dominant idea was bold but sound. It consisted of conducting the training from the small units upward, by giving them experience at the front, and placing their officers as soon as possible face to face with their responsibilities on the enemy front.

These periods of training in active combat had to be conducted with special precautions to avoid disasters; and the method adopted was by placing these smaller units in Allied units of a larger type. There was no question of "amalgamation," as has been wrongly stated, and this word never should have been uttered, because amalgamation might seem to imply the

creation of Allied mixed units, a method which could not be reconciled with the principle of forming an autonomous army. It was simply a question of *temporarily brigading* the American troops with those of the Allies, for the purpose of giving General Pershing war-hardened American units from which to make an American Army ready for immediate action.

To this end, the divisions debarking in France, were at first grouped in carefully chosen and prepared cantonment zones, either within the army zone (in the regions of Neufchâteau, Langres, Bar-sur-Aube, Châtillon-sur-Seine), or in the interior zone (chiefly for the base divisions), in proximity to the lines of communication starting from the ports. An exception was made in the case of the Artillery brigades, which were gathered together in camps especially equipped for the purpose of intensive service practice (at Valdahon, Coëtquidan, Meucon, Souge, La Courtine).

Thus, the American Army had at its disposal for its installation in France 35 cantonment zones representing a total area of 15,750 square kilometres, 43 barracks, not including forts, 17 temporary camps and 6 artillery camps.

For the completion of existing installation it

received a supply of barrack and camouflage matériel, which included more than 4,500 huts of various types, and amounted to the sum of approximately fifty million francs.

The sanitary organization was developed side by side with the other material installations, and the American Staff had at its disposal, in addition to its own establishment, 30,000 beds in the French hospitals, and accommodations for 100,000 in large establishments, such as colleges and hotels.

We have seen that on their arrival in Europe the divisions were already formed, but that it still remained to complete their equipment, and more especially their training.

General Pershing, with the approval of the French High Command, decided to have them pass through the following cycle, consisting of four stages:

1. The training of the elementary units of each branch, up to the Regiment (two to three months), in separate camps for the Infantry and for the Artillery;

2. First sojourn on sectors by regiments, brigaded with French divisions (about a month), the regiment having its own flag, representative of its identity as an American unit, which was not in any case to be lost sight of;

3. The reunion of the whole division in camp for its training as an organized division (about one month) ;

4. The taking over of a calm sector by the division (indeterminate period).

To sum up, a division was considered as prepared to hold a division sector with all its required operations, within about five months after disembarking.

There were, as we have seen, the strongest incentives for reducing this time. General Pershing did not fail to do so, and from the moment when the battle was raging, he did not hesitate to shorten or even to omit certain phases of the programme which he had originally and very logically established.

In 1917 the training of American divisions was undertaken with the collaboration of the French General Staff, and of the French Army itself, since the first divisions that were landed were intermingled with the French divisions in the same camps.

Later, as the number of American instructors gradually increased, they stopped giving to the newly landed divisions more than a few French demonstration units, and some fifteen advising officers.

Finally, these divisions went to the front,

accompanied by a small group of selected French officers.

The training of officers and that of the special American Services was given in numerous schools which General Pershing organized in 1917, and which were in full operation in 1918. They may be grouped under three heads:

1. Schools for the training of officers or candidates for each branch, the most important of which was the Artillery School at Saumur;¹

2. Corps Schools, comprising a group of schools for each Army Corps;

3. Army Schools, grouped for the most part at Langres, and in particular the Staff School.

These various establishments were expected to furnish several hundred officers per month at first, and several thousand per month later.

In speaking of the military effort in the United States, we have already emphasized the superior quality of the men composing General Pershing's Army.

The man in the ranks was a good soldier, vigorous, agile, intelligent, attentive under

¹ This school, the organization of which had been recommended as early as the month of May, 1917, by the American Military Mission at Paris, with the approval of the French General Staff, was remarkably equipped. It comprised no less than forty French officers among its teachers.

training, vigilant in the trenches and of great endurance. There was some lack of discipline at the start, but the American Command took the most energetic methods to correct this defect promptly. The Subaltern officer was full of spirit and eager to learn and to fight; he had almost everything to learn at the same time that he was expected to train his own troops; but thanks to his boundless energy he was trained quickly and well.

Undoubtedly what remained General Pershing's most difficult task was the formation of the Staff and Field officers, for regular army officers were few in number, and a certain time was required even in their case to bring their training up-to-date. In point of fact, it was the lack of training of the newly formed Staff, and the inexperience of the special Services which constituted the weak point in these fine divisions.

It must be acknowledged, however, and many French and British officers were agreeably surprised, that the American Staffs made rapid progress at the front. By confining themselves at first to small operations carefully prepared, they sought to test by results the practicality of what they had learned, and very quickly acquired self-confidence. On the

other hand, the time was approaching when the disorganization of the German units in the last phase of the war, was destined to help these American Staffs to fulfil the rôle for which they had done their best to prepare themselves, but which demands, no matter what one does, several months of apprenticeship.

To sum up, at the outset of 1918, General Pershing lacked nothing but the rapid arrival of troops to fulfil the vast programme that he had set himself.

His bases were improved;

His communications were well established;

The training was at the high tide of activity and productiveness.

His last recommendations to Washington relative to *the coördination of instruction in the United States and in France*, were intended to affect an important gain in time, by reducing or suppressing the first stage of training, provided for the small units after their debarkation.

It was at this moment that the character assumed by the campaign of 1918 determined the intensive current of American transportation, and induced General Pershing to engage

all his available troops at the side of the Allied armies, with a spirit of decision and abnegation which will remain one of his finest claims to glory among so many others.

CHAPTER V

MILITARY SITUATION ON THE WESTERN FRONT IN MARCH, 1918

Waiting for the Great German Offensive

At the moment when the indecisive campaign of 1917 came to an end, with the halt of the British Army's victorious operations in Flanders and the disaster in Italy, the Revolution in Petrograd had brought the Bolsheviki into power, and had stricken Russia from the number of the belligerents.

Released henceforward from the Russian front, and having strengthened the position of their Austrian allies in Italy, the Germans undertook their preparations for the campaign of 1918 by concentrating the greater part of their forces on the Anglo-French front.

By transporting these forces at an average monthly rate of between 12 and 13 divisions, Germany had, by the beginning of March, 1918, assembled 195 divisions in France, in place of the 146 she had had there in November, 1917.

The German General Staff, confident of a swift success, considered this figure of 195 divi-

sions as quite sufficient for engaging battle, especially as they had the assurance that they could increase it by bringing new units from the East, and by employing the class of 1919.

These movements of troops by rail could not be effected without being observed by the Allies, but the redistribution of divisions behind the front left the Allies in doubt, up to the last moment, as to the direction of the principal offensive chosen by the German General Staff.

Meanwhile, the Allied General Staffs, conscious of the danger threatening the Entente through the defection of Russia, had ever since the month of November, 1917, been studying the means for checkmating the German offensive on the Western front.

On November 19th General Foch, at that time Chief of the General Staff of the French Army, set forth the conditions of the problem and the solution which he favored, insisting upon the necessity first of all of strengthening the forces of the Entente armies, redistributing the reserves, perfecting their defensive organizations, and lateral communications; and lastly, of formulating *an offensive plan for 1918*, and undertaking its preparation. But he was at that time only the Chief of Staff of the French

Army, and while he was able to express his views, he was not in position to give his orders. Accordingly, it was only the first part of his programme that was then carried out.

In a series of deliberations of the Inter-Allied Supreme Council of War, held at Versailles, the successive steps were determined in the defensive portion of the plan for which General Foch had indicated the general lines.

The Belgian Army was reorganized and reinforced.¹

Italy's Army, with the aid of her allies, was reconstructed in 51 divisions, in place of the 65 which it had comprised before the disaster of Caporetto, and resumed the training of its units in the course of the winter of 1917-1918.

The Anglo-French armies developed the defensive equipment of their front, and worked out the problem of reënforcement, in case of need, by calling from the reserves of one or the other of their armies.

The French Army, at the cost of heavy sacrifices, accepted by the nation, maintained the number of its large units, and comprised at the opening of 1918:

99 divisions in France, 5 in Italy, 8 at Salonica;

¹ Its six army divisions formed practically twelve divisions.

2,579,600 men on the French front;

141,000 men on the Italian front;

228,400 men on the Salonica front.²

The British Army, not having sufficient resources immediately available to complete its divisions, reduced their composition, and was consequently diminished by 186 batallions. It awaited battle with a shortage which its regimental depots could not fill.

Lastly, several Anglo-French divisions were still maintained on the Italian front, Italy furnishing in exchange 80,000 laborers for the Anglo-French armies.

To sum up, the Allied Armies on the Anglo-French front were about to meet the onslaught of the German armies with an initial inferiority of about 33 divisions.³

The general public had no suspicion of this; and perhaps it would have been difficult to

² France which, since 1914, had mobilized 7,570,000 men, still counted in January, 1918, 5,286,300 mobilized men distributed as follows: 3,239,800 combatants, including her colonies; 356,500 men in hospitals; 841,000 men (including 226,000 from the auxiliary service) mobilized in war industries; 849,000 men (including 335,000 from the auxiliary service) mobilized in other corps and troops of the Interior Economy service.

³ On the Anglo-French front, on March 21st: France, 97 divisions; England, 47; Belgium, 12; Portugal, 2; America, 4 (not fully trained); total, 162 divisions, as against 195 German divisions.

In Italy: 5 French divisions; 5 British divisions.

At Salonica: 8 French divisions; 6 British divisions.

confess it to them. They were painfully surprised when it later became known.

However, if an estimation had been made of all the Allied resources in men, British, French and Belgian, even without counting the American forces yet to come from the United States, they would have surpassed the utmost that Germany appeared able to muster for the year 1918.⁴ But, in order to use their maximum strength, the Entente Powers would have had to decide irrevocably *to stake their all* at the beginning of 1918, and at any cost to fight the decisive battle of the war in the course of that year.

This resolution was not taken until later in the midst of the battle, and under the inspiration of the great military Chief, who proceeded to carry it out with unalterable determination to the day of the armistice, November 11th, 1918.

At the opening of 1918 there was no question of doing this. The two Commanders in Chief, of Great Britain and of France, judged that the state of their forces did not permit

⁴ Estimate of resources in men at the outset of 1918:

France, 682,000 men; England, 764,000 men; Belgium, 30,000 men. Total, 1,476,000 men (to keep up the strength of the 181 divisions in France).

Germany alone: 1,085,000 men (to maintain the strength of 241 divisions).

them to undertake any great offensive operations, but only to await the attack by Germany.

If it is true, as Marshal Foch expresses it, that "making war consists in attacking," the waiting policy could not in any case have led to a decisive victory.⁵

The second part of the plan that he had proposed on November 19th, *the offensive part*, had not even been entertained.

Nevertheless the Allied and Associated Governments, impressed by the necessity of at least preparing a strong response to the German offensive, decided to constitute an *Inter-Allied Reserve*, to be held at the disposition of the Executive Committee of the Supreme Council of War, of which General Foch was named President.

This half-measure constituted only a timid step on the road to that unity of command which was universally recognized as necessary, but was still encountering powerful opposition.

In point of fact the general reserve was never constituted, and the Executive Commit-

⁵ The disadvantages of the defensive strategy are brought out clearly by the following figures:

The *defensive at Verdun*, from February 21st to July 15th, absorbed 62 divisions.

The *offensive of the Somme*, from July 1st to November 1st, absorbed 44 divisions.

Verdun cost us 350,000 men.

The Somme cost us 195,000 men.

tee at Versailles was too short lived to show its inefficiency.

It was the Battle, that is to say, the supreme form of dramatic action, which leaves no place either for the deliberation of Governments or for those of a Council of War, or even of an Executive Committee, Battle which must be lost or won, which a number of leaders can always lose, but which only a single leader is capable of winning, that was preparing, in the very midst of our discussions and with implacable rigor, to recall each one of us to reality!

CHAPTER VI

SITUATION OF THE AMERICAN ARMY IN MARCH, 1918

RESULTS OBTAINED BY ONE YEAR OF PREPARATION

The American Army on the Eve of Battle

It will be remembered that the Government of the United States had early in the year 1917 planned for the armament and maintenance of an army of 3,000,000 men, to be achieved within two years. The first part of this programme consisted, in pursuance of General Pershing's request, in forming, equipping and transporting to the Western front an army of 1,200,000 men.

Now on January 1st, 1918, the United States Army had increased only to a total of 1,325,000 men, a figure still too low to assure the carrying out of the programme of 1918.

Consequently new drafts had to be called.

Out of the total 42 divisions as yet organized, 8 of which were Regular Army, 17 National Guard and 17 National Army, only 6 had been landed in France. Four of these were fighting divisions: the First and Second

Divisions of Regulars, whose training was finished and who were holding a calm sector in the Woevre; the 26th and 42d Divisions of the National Guard, who were completing their term at the front, as separate regiments, in the main body of the French army; and two divisions for training, base or replacement duties: the 41st and 33d of the National Guard, not yet completed.

Consequently 36 divisions still remained in the training camps in the United States:

6 of the Regular Army;

13 of the National Guards;

17 of the National Army (including one division of colored troops, whose composition was yet to be determined).

The equipment of these units was far from complete, because of the time required to get the war manufactures in full operations, especially that of material and munitions for the artillery. While a large output could confidently be looked for from the American plants in the future, it was the part of prudence — as events proved — not to depend upon them for artillery before the end of the year 1918.

Consequently the American divisions left the United States with a very meagre arma-

ment, and upon landing in France received from the French factories their artillery equipment, and a large part of the other indispensable supplies. The result was that certain units, particularly the Artillery regiments, were obliged after debarkation to go through a *period of organization* before entering upon or continuing their training.

The vast Aviation programme for which the United States had voted impressive sums, a programme which they took pride in having conceived and on the accomplishment of which public opinion had naively based the hope of an easy victory, — this programme had suffered delays which compromised its success. On the one hand, the spirit of innovation, and on the other, the search for types adapted to American industrial methods had resulted in producing practically nothing. Profitable efforts were concentrated, and rightly, on the Liberty motor, throughout many months; but the motor was not yet perfected; nor was it destined to be, until the close of the summer of 1918.

So it was also France which furnished the greater part of the Aviation equipment, and must face the prospect of continuing to furnish an important part of it even in 1919.

However, thanks to a clear understanding of this industrial coöperation, the entry of the American army into action remained essentially dependent upon its training and transportation, and not upon its equipment.

What was destined to be the value of American intervention, assuming that it should take place in time? It was already possible to foretell this.

The regular divisions had at first been sacrificed to the organization of the National Guard which, in the original plan of transportation, was destined to take precedence over the regular army. Later, at General Pershing's request, it was decided, or at least so it would seem, to give preference to regular divisions instead. But with the exception of the 3d and 4th Divisions, which were practically complete, the regular divisions had important deficits in men (averaging from 80 to 140 to the company, instead of 250), in saddlery, and in Artillery horses.

The various staffs of officers were pretty nearly complete; those of the Artillery, however, were drawn to a large extent from the other arms of the service, and had everything to learn. It was only the Regular Officers and

those who came from the school at Fort Sill who proved themselves first-class instructors.

Notwithstanding these facts, and in spite of being greatly under-officered because of the drain upon them made for the benefit of the National Guard or the National Army, the Regular Divisions had preserved and sustained proudly their fine traditions of discipline and honor. They were destined to give proof — as the 1st and 2d Divisions had already given at the front — of a high order of bravery in action.

The organization of the National Guard was pretty nearly completed, and its deficiencies were confined to its supplies. But in regard to the physical quality of the men, it had suffered from defective recruiting; and there was an obvious lack of discipline which could be remedied only by a careful choice of officers and by rigorous training. It was because of such careful selection and thorough training that the 26th and 42d Divisions aroused the admiration of their French comrades, who refused to distinguish them from the Regular Divisions.

As to the divisions of the National Army resulting from conscription and recruiting from all classes and from every section of the country, they included some excellent material.

One cannot fail to regret the preferential transfers made from them and the continual shifting about, which retarded their organization, interrupted their training and fostered a feeling of discouragement among their officers. They had in any case serious handicaps to overcome. At the same time, their higher officers were drawn from the officers of the Regular Army, the subalterns were young officers coming from instruction camps, and fired, as we know, with a splendid spirit. Hence it was impossible to doubt for a single instant the account that these divisions would give of themselves at the front.

In a general sense, at the moment that the campaign of 1918 opened, the individual training of the soldier was ended in the United States, and that of the special Services very nearly so.

The Artillery was still behindhand, owing to lack of equipment, notwithstanding that the French Government had obliged the American General Staff to accept a shipment of several French instruction batteries for use in the American training camps.

The Coast Artillery alone (thanks to having always had a responsible head), had been able

to concentrate its means of instruction so as to obtain better results.

The Engineers were a remarkable body of men, but still lacked the proper guidance to direct their work in accordance with the needs of actual warfare.

In regard to Aviation the fine results obtained by instruction at the Aviation fields could not fail to make one deplore the lack of airplanes. The Chiefs of the American Aviation Corps, entering boldly upon the path of progress (since no routine stood in their way), had, in steady collaboration with technical advisers from the Allied armies, organized schools that might be held up as models: schools for pilots, assistants and aerial gunners which made it possible to count by July upon a sufficiently numerous and thoroughly trained personnel.

To sum up: in all the branches of the army, the training of officers and troops had made serious progress in the United States; but they had come to a point where the High Command must intervene to put an end to the hesitations and divergences of views and efforts, which unhappily were to be found between one division and another.

In France, thanks to the facilities for in-

struction offered by the proximity of the battlefield, and the nearness and close collaboration of the Allies, together with an abundance of material of war, the troops completed their training swiftly and thoroughly under General Pershing's direction.

Their respective Staffs worked with a profound sense of their responsibility and a high ideal of their professional duties.

The first units to go into action exhibited solid soldierly qualities. The Infantry showed abundant fighting spirit. The Field Artillery showed good marksmanship. The Brigade of Coast Artillery, trained in the camp at Mailly, with French guns mounted on railway trucks, gave, wherever it was utilized, complete satisfaction.

In order to hasten the progress of the training of the army, General Pershing, as already indicated, had arranged to carry it on concurrently in the United States and in France. Furthermore, he did not hesitate for an instant to modify the regular course, to the end of throwing into battle all his available forces.

Unhappily these available forces depended essentially upon tonnage, and the vital question of transporting the army was still far from solved.

All advance calculations regarding transportation had proved erroneous. Existing conditions forced the authorities to recognize that they were still very far from carrying out the plan proposed by General Pershing and approved by President Wilson.

The American public, sustained by the hope of immediate improvement, was wholly ignorant of the actual number of troops landed in France. It readily believed, beginning with the winter of 1917, that the American army in Europe already numbered 500,000 men,—who could tell?—perhaps even a million!

Now the rate at which the troops had been transported was at most only as follows:

20,000 men in July, 1917;

18,000 men in August;

24,000 men in September;

16,000 men in October;

30,000 men in November;

35,000 men in December;

50,000 men in January, 1918;

34,000 men to the 20th of February.

Total, 227,000 men in France.

At the close of the year 1917, the official schedule at Washington called for the trans-

portation of between 70,000 and 100,000 men during 1918, and since the press was permitted to echo this report the public had a right to assume that the estimate was well founded.

Apparently it would have been a difficult task to justify these figures, for the benefit from new vessels under construction would not begin to be felt before the end of 1918. Now, they were as yet only in the month of March, and the menace of the German offensive was looming large on the horizon.

The most frightful battle in all history was about to be unchained. Of what weight could the army of the United States possibly be, if the Government at Washington did not at all costs solve the question of transports by the prompt and effective requisition of the merchant marine, and by the coöperation of Great Britain?

It had been endlessly repeated that the year 1918 was to be the decisive year, that the army of the United States, or at least a large part of it, must be ready to enter the struggle, that there was not a single hour to lose, not a single ship to leave idle.

Now, on February 1, 1918, Marshal Foch, awaiting the imminent battle, said to us regarding the American army, "It is a big

thing, and yet after all it is very little. A force that is of such trifling military value to-day will never make an army capable of playing the grand rôle predicted by President Wilson, unless some man of exceptional energy, some veritable human motor, can stir up the people over yonder sufficiently to prevent America's missing her train in 1918!" (*sic.*)

Beyond a doubt, the American Government found itself facing the vastest, most complicated and most unforeseen military problem that any country has ever had to solve in the course of a war.

It was for these reasons that the progress made, up to the opening of the year 1918 could be very differently estimated, according to whether one had in mind the starting point in the United States in April, 1917, or the point achieved in France in March, 1918. But in either case the estimate would be misleading, since it would depend either upon unreserved admiration for the results obtained after starting from nothing, or upon premature disillusion at discovering the lack of efficiency of the American army on the eve of the battle of 1918. In the eyes of those who knew the situation on both sides of the Atlantic, the vital thing was *what still remained to be done*, start-

ing from the results already obtained, *in order to make quickly available the considerable existing resources.*

To be sure, the American forces, ready to be sent into action, fell far short of the figure that we might have wished; but we French and British might well ask whether we ourselves had done our utmost to bring our own forces up to the maximum on this French front, where the future of the world was to be decided within the next few months? And could anyone deny that the American army, with its forty-two divisions each of 27,000 men then being trained, its immense national resources, its future production of war material, represented an irresistible force for the months to come?

Only, it was imperative that this army should be employed in a sufficiently near future for it to serve *to reinforce* the Allied armies and not *to replace* them. The supreme moment was at hand. The hour had come to strike hard and to strike together.

The truth of this was recognized at Washington. We have shown that the means existed, and that the directing organism had been created by Mr. Baker. There lacked only a military Chief, a human "motor," to borrow the expression of Marshal Foch. Fortunately

the Secretary of War had just found such a man in the person of the new Chief of Staff, General Peyton C. March. And it was thanks to these two men in the United States, and to General Pershing in France, that the American army was destined to take part in the battle of the western nations.

CHAPTER VII

THE AMERICAN ARMY'S MARCH TO THE TUNE OF THE GUNS

The formidable offensive, in which Germany was about to engulf all her resources, was launched on March 21st, on the Picardy front, with unexampled amplitude and violence.

Its aim, as we know, was to split asunder the Anglo-French armies thrusting the British aside and at the same time opening a road for itself to Paris.

One year, almost to a day, had passed since President Wilson placed the resources of his country at the service of the cause of humanity, to save the honor of the United States and the liberty of the world; yet the United States had landed in France at most only five or six incompletely trained divisions,¹ in contrast with the hundred and sixty Allied divisions then holding back the German onslaught. What was General Pershing going to do?

On March 28th, at the height of the gigantic

¹ Only the 1st and 2d divisions of regulars were ready to go into action.

The 26th and 42d divisions of National Guard had not completed their training as organized divisions.

The remaining two were base and dépôt divisions not yet fully landed.

battle, he took action, the full value of which was soon to be shown by the events which followed, placing all his troops and his own services at the disposal of General Foch.

The first division of regulars was forthwith sent to General Pétain, to be used in the battle of Picardy. The second division, and the 26th and 42d of the National Guard each respectively relieved a French division; four regiments from replacement divisions were assigned to a sector. All the Artillery was sent to the front. The first colored regiments entered battle alongside of French troops.

This was the best that could be done for the time being. But the Government of the United States was soon going to make it possible for General Pershing to do a great deal more.

Did Germany really believe that even though the American Army had landed in France, it did not mean to participate in the final act?

Was Germany sincere or was she only trying to soothe her people's justifiable alarm, when she encouraged the most authoritative of her military writers to develop the theme of "America's Impotence?"

"The American army does not exist," was

repeated by the German press to the point of weariness. "It is neither equipped nor trained; it is totally lacking in officers; and in any case there are no ships to transport it."

Germany was destined to be swiftly and cruelly disillusioned, for America promptly gave a startling contradiction to these inspired arguments.

President Wilson concluded a first agreement with the English Ambassador at Washington, Lord Reading, for the exclusive transportation of Infantry and Machine-gun troops, with no other limit than that imposed by the available American and British tonnage.

His speech at Baltimore, fixing in monumental phrases the goal to be attained and the means by which to attain it, formed the only answer to Germany's dream of domination that the events would warrant:

"There is, therefore, but one response possible from us. Force, force to the utmost, force without stint or limit, the righteous and triumphant force which shall make right the law of the world, and cast every selfish dominion down in the dust."

The echo of these strong words crossed the Atlantic, and while Germany was beginning to be afraid, all France, comparing the speech

of President Wilson with General Pershing's act, understood what the former meant to say, and what the latter was going to do.

The force of America, "force without stint or limit," was henceforth no longer her gold nor her unlimited resources, it was her magnificent human material, the strength of her Regular Army, her National Army and National Guard, which General March was welding into one and the same great army, "the Army of the United States."

The Allied and Associated nations were preparing to face the common danger, which was uniting them more and more closely, *by pooling all their resources*, and by a complete application of the principle of coöperation alike on sea and on land, in transportation as well as in battle.

Entire fleets, American and British, were soon tracing across the Atlantic the great highway of communication between the democracies of the West. By hundreds of thousands of men, these fleets poured the energy of the New World into the Old World, to the end of saving them both.

America, marching to the music of the cannon, entered battle at the fiercest moment of the struggle of nations. Her soldiers for the

past twelve months had awaited only the chance to measure themselves with the enemy.

When the great occasion offered itself, General Pershing, seized it, in such fashion that, if the war had terminated on the morrow, this act alone would have entitled him to be enrolled in the pages of History.

But the war was not destined to end on the morrow, since it was destined to end only with the victory of the Allies; and the Allies must check the German onslaught before they could themselves pass on to the offensive. But, at the very moment when the unity of command was an accomplished fact, and entrusted to the hands of an undisputed Chief, the act of General Pershing had a very high moral effect.

It signified the opening of "The Battle of the Coalition," the battle in which all separate interests were to be effaced before the common interest, and every energy strained toward the primary goal of the war which M. Clemenceau defined by a single word, "*Victory!*"

Within a few days during which the Supreme Chief of the Allied armies by a prodigy of energy reëstablished and strengthened the connections between the British and French armies, all the decisions which would formerly

have demanded weeks or months, were solved by the Allied and Associated Governments.

The plan of transportation became the object of a series of agreements prompted: on the American side, by General Pershing's quite legitimate desire to form a large autonomous army at the earliest possible moment; on the British and French side, by the need of obtaining the immediate coöperation vital to the maintenance and reënforcement of the fighting forces, the Allied General Staffs being convinced that this temporary brigading of the American troops with the French and English forces was the swiftest and surest means that General Pershing could adopt to form a great army capable of measuring itself with the Germans.

The first agreement concluded between President Wilson and the English Ambassador at Washington, regarding the exclusive transportation of Infantry and Machine-gun units, was replaced by the conventions of April 24th and May 3d between Lord Milner and General Pershing.

General Foch, for his part, requested the priority of transportation, during three months, of a monthly minimum of 120,000 Infantry troops and Machine-gunners, figures

which he considered it desirable to increase as greatly as possible,— a result which in point of fact was achieved.

In March 64,000 men had been brought across. In April 93,000 were transported, which was already a perceptible increase over the preceding months. In order to meet the desires of General Foch, the Governments of Great Britain and the United States estimated that by pooling their resources they should be able to transport:

By British tonnage: 130,000 troops in May, 150,000 in June, 150,000 in July;

By American tonnage: 95,000 troops in May, 80,000 in June, 95,000 in July.

These estimates were exceeded. In place of 225,000, 230,000 and 245,000 troops in the respective months, they took across 244,000, 278,000, and 308,000.

Lastly, on June 1st, the three Governments of Great Britain, France and Italy, facing the gravity of the situation in Europe, expressed their gratitude to President Wilson for the rapidity with which the United States had come to their aid; and then requested him, in the name of Marshal Foch, to make provision for sending over to France a total of 100

divisions for the campaign of 1919, at an average of 300,000 men per month.

This demand, far from alarming the Government and people of the United States, was received in a magnificent spirit. "Why should the limit be set at five millions?" demanded President Wilson, when speaking in New York of the future American Army; and the Senate Committee on Military Affairs, faithfully interpreting the will of the people, demanded that there should be sent to Europe before July, 1919, an army of three million soldiers, of which not less than two million should consist of fighting forces.

American public sentiment had outstripped the desires and the needs of the Allies, as well as the decision of its own Government, in affirming that America was ready for all sacrifices and all efforts, with no other limit than that of victory.

In view of such manifestations, has not one the right to maintain that democratic governments will never regret placing their confidence in popular judgment, so long as they are careful to enlighten the public in accordance with their duty?

America looked forward to the goal: *Victory*. But, whereas as in 1917 she was ignorant

of the difficulties to be overcome, in 1918 she was fully conscious of the sacrifices that must be accepted. She agreed to them in advance, with the resolution of a great people who know that, in the course of the grave action called *Battle*, the hours strike victory or defeat, according to the good or bad use that has been made of them.

After having asserted the necessity for unity of command, America recognized that a single Chief, whatever might be his authority, could not conquer all alone, that first of all he must be assured of a numerical superiority over his adversary. It was this superiority that America resolved to provide.

Beginning with April 29th, thanks to a clear vision of the realities of war, some of the worst days of which had been lived through by Secretary Baker himself in France, the weekly Bulletin of the War Department, inspired by a fine frankness and a lofty spirit of the common good, contained, under the heading, "Imperious Duty Incumbent upon the United States," the following declaration:

"Our imperious duty demands that we should furnish replacement units for the armies fighting in France. We ought to be in a posi-

tion to send to the front reinforcements of men completely and systematically trained.

"In addition to those who are already in the service of the flag or in the instruction camps, and those who have been called into service, very important contingents ought to be raised within the near future."

If we weigh the words carefully, this amounted to a recognition of the necessity and a declaration of the willingness to reinforce the Allies in the course of the war, regardless of the use that was to be made of these trained reinforcements, up to the moment when the American Army would be able to intervene in the full plenitude of her own resources.

The British and French training officers, conscious of the greatness of the drama which was taking place in Europe, redoubled their activity and energy in their desire to place all their experience at the service of their American comrades.

They strove to complete the tactical training of the small units, with a view to their almost immediate employment at the front. In the divisional camps, they multiplied the exercises essential to successful coöperation between the separate branches of the service, as well as the practical exercises of the Staff officers. Natu-

rally, none of them made any pretention of giving complete instruction. But they all had the conviction that they were laying a solid foundation for such instruction, that they were facilitating the personal efforts of the American officers and that they were saving valuable lives to the great sister nation who was their associate.

Without delay, Congress completed the legislation necessary to make America a formidable military power. The decision having been once taken to increase and practically to double the army between 1918 and 1919, the problem was to find the means, and to avoid every hitch in its organization, just as they were trying to avoid all delays in transportation.

But it was found that after furnishing the men needed to form an army, which in July amounted to two and a half million men, the category of American citizens subject to conscription under the Act of Congress of May 18, 1917, would be exhausted by October 1, 1918.

It should be remembered that the registration held in pursuance of the conscription act of 1917 included 9,600,000 registrants. From this total the President had authorized the call-

ing out of two contingents of 500,000 men each, in addition to bringing up to full strength both the Regular Army and the National Guard. What still had to be done was to change the general registration list into an open list in which would be enrolled annually the young men who had attained the age of twenty-one years.

This measure was taken by the adoption of Senator Chamberlain's bill; and the President was authorized:

1. To order the registration, at a date to be assigned by himself, of all male American citizens and all male residents in the United States who had attained the age of twenty-one years since June 5, 1917 (the order for which was issued by the President June 5, 1918).

2. To prescribe in the course of the following years the registration of the new classes under the same conditions.

This was equivalent to establishing a regular method of recruiting which would result in an automatic increase of the army by annual classes.

The number, however, of young men who had reached the military age of twenty-one years between June 5th and August 24th, in other words, those affected by the law of 1917

amounted only to 158,000, out of which only 78,000 were eligible for service in the army.

Consequently this measure did not give all the resources immediately necessary. Accordingly the problem, studied in all its aspects, was submitted to Congress, which passed a new military act that was approved by the President on August 31st.

The military age was extended to the limits included between 18 and 45 years.

On September 12th, the day appointed by President Wilson for the registration of all citizens affected by the new law, the very day when the young Army of the United States, led by General Pershing in person, won its splendid victory at Saint-Mihiel, 14,000,000 men registered!

Out of this number it was calculated that more than 2,000,000 would be called out from 1918 to 1919, to carry out the programme of the American General Staff.

When the law had once been passed, the colossal work involved in the important tasks of registration, examination, calling out and incorporation of the contingents, was directed by Provost Marshal Crowder, with a spirit of foresight and decision which only his modesty

prevents us from heralding and praising to the extent that is his due.

Then, under the impulse given by the Secretary of War and by General March, the General Staff made preparations for the formidable increase of the Army, the necessary issue of calls to the recruits, the enlargement of the programmes for war manufactures, and the intensification of training in the United States.

It was truly an heroic period, when all America with her spirit reaching out toward battle as though she caught its far off echo from across the seas, finally felt herself in the war, and actually was in it. We might then have demanded of her to do the impossible: she was ready to do it. She was doing it daily, since, in spite of the menace of the submarine her innumerable convoys laden with troops protected by an active, venturesome, intrepid Navy, made their schedule passage from New York to Bordeaux, to Saint-Nazaire or to Brest.

These transportations had suddenly assumed such importance that it became an urgent matter to create new divisions even before completing the plan for extension of the Army in 1919.

General March, reluctant to undertake more than he could accomplish, but desirous above all else not to lose a single day, decided upon an average monthly creation of 5 divisions, and began with 6 divisions in July.

He wanted to have a standing force of eighteen complete divisions in the United States, together with replacement troops sufficient to furnish all the monthly reinforcements. This was the object of the so-called "Replacement Camps," which he established to the number of three for the Infantry and Machine-gunners, two for the Artillery and one for the Engineers, with a respective capacity of 40,000, 30,000 and 28,000 men each.

It was hoped that these camps would at last furnish a remedy for the serious and much complained-of disadvantage of having to fill up divisions, on the point of departure, with intrained recruits.

To sum up: the programme for augmenting the army, contemplated by the Council of Versailles, on the lines laid down by Marshal Foch, was exceedingly complex. The American Chief of Staff, bent upon solving it, conducted a study of all possible means of achieving such an increase (recruiting, officering, transportation, equipment), before formally committing

himself for the coming year. But the time spent in these necessary studies was not lost, since General March was able to take every possible measure to prevent the delay of a single day in the execution of his plans.

It was possible to place full confidence in the new Chief of Staff and admire the transformation that Secretary Baker had introduced into the administration of the war since 1917.

The campaign of 1918 had given food for new discussions, without practical conclusion, in which the American General Staff too often contrasted trench warfare with open warfare. Watching from a distance, they were tempted to conceive of two different types of fighting, when in point of fact it was only a question of two closely associated forms of *modern warfare*, characterized by modern armament, continuity of fighting-fronts, and utilization of the battle-ground equally in attack and in defence, for fighting in the open or for entrenching.

“On our Western front,” said Marshal Foch, on February 27th, regarding this very question of training the American troops, “we have ceased to manoeuvre in the open for any length of time; nor is this anything new. As far back as 1914, even in battles like that of

the Marne, at the end of a few hours trenches were dug. But after all, the important thing is not training programmes, but *a sound doctrine*, and I fear that the American army will have to go through the same hard stages as ourselves, instead of overleaping them at a single bound. She no longer has time to spare for experiments." Then, after a moment's reflection, he added, "If I were as powerfully aided in the United States as I am in France, I could easily find, between the American Army and our own, the formula for an offensive battle that positively would sweep all before it." Prophetic words, which were destined to find their application sooner, perhaps, than Marshal Foch then thought.

So, even before the German offensive was launched, he believed that intensive training alone, in accordance with the doctrine of war which up to then had made it possible for the Anglo-French forces to check or to drive back the Germans, would assure in due time the effective intervention of the American Army.

In pursuance of the request of the heads of the British and French Commissions, who had been informed of the need of this step, General March issued orders May 13th that the foreign advising officers should henceforth be used not merely to give instruction in special features

of trench warfare,² but also to give to the smaller Infantry units, up to the battalion inclusive, the complete tactical training demanded by modern warfare.

This decision, conforming to the views expressed by Marshal Foch, agreed also with the training programme which General Pershing had just sent with his recommendation to Washington.

It was destined at last to do away with the very natural doubts and hesitations of the Division Commanders, and permit them all to make the maximum use of the experience of veterans of the war. Certain divisions immediately constituted a *demonstration battalion*, and in some of the camps one might even see all the subaltern officers taking part in the exercises in the ranks.

The tactical training of the small units and of the Staff and Field officers, instruction in liaison duties, the training of the Artillery (at last organized in special camps by a recently appointed chief of that arm of the Service), all received a marked impulsion from the American Command.

² This training in the special features of trench warfare had by this time been acquired by American instructors, who had nothing further to learn from their foreign teachers. But the weak point still remained the *tactical* training.

Undoubtedly, everything was not yet going in a perfect manner. The disadvantage of being unable to regulate the embarkment of divisions according to their degree of training, still continued. Divisions thoroughly trained were still subject to disorganization on the eve of their departure, and the best use was not always made of the good American officers whom General Pershing sent back to the United States to aid their younger comrades.

Undoubtedly, also, part of the American General Staff, justly proud of the first successes gained at the front by General Pershing's troops, showed an inclination to dispense with the aid and coöperation of the foreign advising officers, just as it was too often disposed to relegate to positions of secondary importance the best American officers returning from the front.

The first of these tendencies is so human that one could not blame them for it; at the same time it was not one in which they could be encouraged to persist; for without wishing to detract in any way from the glory of the first units to enter battle, we knew that they still had much to learn, and that in any case the troops and officers alike, who were still in the United States, would have to work hard to

bring themselves up to the standard set by their fellow countrymen already at the front.

Nevertheless, taken as a whole, the training of the Army in the United States was making constant progress. The great lessons at the front could be trusted to do the rest.

In France General Pershing had powerful methods at his command, and he gave to the training of the troops that firm direction and sustained impulse which permitted him to achieve the prodigy of training an army *for battle while the battle was in progress*.

The school at Langres for Staff officers, that at Saumur for Artillery officers, those at Issoudun and at Tours for Aviation, the Corps Schools and the Army Schools were in full running order.

The divisions were being formed; the Artillery in special camps in the interior of France, with a total capacity of seven brigades at a time; the Infantry in camps within the army zone. A numerous French personnel, Staff and regimental officers, demonstrating and training units were permanently at the disposition of the American General Staff. The intensive work of the American army recalled to mind the training period of the French army when, from 1915 to 1916, Marshal Joffre

undertook to train the whole army over again in conformity with the new methods of combat which perfected armament made necessary in the very midst of the war, even for those soldiers who had been fighting since 1914.

Thus, as we have seen, the problem of raising an army was solved by Congress; that of transportation, thanks to the coöperation of Great Britain; that of training, by the close collaboration of the Allies; and that of organization, through the activity and authority of General March.

Unfortunately, the same cannot be said of the problem of armament: and one hardly dares to think what the consequences would have been if, on the one hand, the French war factories had not been able to meet the needs of the American Army in 1918, and if, on the other hand, America had not continued her war supplies to the Allies.

But while accepting the material which France manufactured for them ("155" howitzers, "75" guns, machine-rifles, aeroplanes, etc.), the American government and General Staff were steadily working toward the goal which every great industrial nation ought to attain: that of being self-sufficient in the pro-

duction of all its matériel of war. This goal America was bound to reach.

After a long period of installation, researches and experiments, which had been the cause of hot debates in Congress, it began to be really possible to see more clearly into the future.

The American war factories were very nearly ready to begin production. With a few more months of work, the industrial forces of the United States would have rallied to the support of her millions of men, to make Germany feel the full weight of America under arms. But, those "few more months" meant 1919, and already the trend of the war foreshadowed a decision before winter.

CHAPTER VIII

THE AMERICAN ARMY IN BATTLE

"This country has only a single army: *The Army of the United States*."

General Order No. 73 of August 7, 1918.

By order of the Secretary of War,

P. C. March,

General, Chief of Staff.

For the past three months, the enemy had been trying by an almost uninterrupted series of formidable battles: in March, to split the English and French forces in the region of Amiens; then, in the month of April to break through the British front in Flanders; on May 27th, to pierce the French centre on the Aisne; on the following days to push forward to the West in the direction of Paris; and finally, on June 9th, he tried once more to break down the front between Montdidier and Noyon.

After some initial successes, he had been held at all points, and, since June 15th his attacks had ceased.

But the offensive of May 27th had brought the Germans within 70 kilometres of Paris, and had given them an excellent primary base facing west, to be used for a new attack upon the capital.

Furthermore, the arrival of Germans on the Marne had deprived the Allies of control of

the great Paris-Nancy railway line, most important for the movements of their reserves.

Finally, the last German offensive, that of June 9th, notwithstanding the sanguinary check with which it had ended, had nevertheless brought under the enemy's cannon the important railway junction of Compiègne.

Moreover, these three months of struggle had cut wide swathes in the British and French ranks.

The reinforcement of two divisions brought from Egypt did not fill up the deficit of the British army, and the new military law could not give it any available new resources before the month of September.

The French army was painfully maintaining through exceptional measures the numerical strength of its great units (103 divisions in France, 2 in Italy, 8 in Salonica); but the four French divisions and the five British divisions which had borne the first shock on the Aisne on May 27th had suffered enormous losses.

It had become imperative to contemplate the utilization of the numerous American contingents, which had been landed since the beginning of May and whose employment on the front had been deferred because of their incomplete training.

Following upon the German offensive of May 27th, General Foch, in agreement with General Pershing, esteemed it necessary to take over and place provisionally at the disposition of the French army, part of the American divisions then stationed with the British army for training. Up to this time, these divisions had served to support the British divisions at the front, and to make up, in a measure, for the extreme numerical weakness of the divisions as a whole.

The application of this measure included five American divisions, thus liberating four French divisions.

These five divisions, at first brigaded with the French divisions, soon afterwards took over a sector of their own, and went into battle, their places being taken by newly landed divisions.

Thanks to the fine spirit and loyalty of the American officers and soldiers, this *temporary* brigading of American divisions, incompletely trained, with the French army, while demanded by circumstances, had given the best results. It had brought immediate and important aid to the French, and it had prepared fighting troops for the day close at hand when General Pershing would be able to form his first army.

Meanwhile, since the beginning of July, numerous signs had indicated that the next onslaught of the enemy, and the last one, would take place between the Argonne and Château-Thierry.

Groups of reserves were straightway gathered in the rear of the Champagne front, on the mountain of Rheims and south of the Marne, between Château-Thierry and Dormans.

But, faithful to his war doctrine, and convinced that only an offensive could lead to final success, General Foch had been preparing since the opening of July for an Allied offensive on a 40 kilometre front, from the Aisne to the Marne. It had for its object the relief of Paris, and was to be undertaken by the armies of Mangin and Degoutte, reinforced respectively by several American divisions. The execution of this offensive was set for July 18th.

The enemy had no suspicion, and pursued its preparations for attack. The German assault was made on the 15th, following the habitual method. After four hours of Artillery preparation, 44 German divisions hurled themselves into action from Main-de-Massiges

(Champagne) to Château-Thierry, on an attacking front of more than 80 kilometres.

By the evening of July 17th, after three days of savage fighting, it was evident that the third great German offensive, carried out with even more powerful means than the two preceding¹ had completely failed.

The documents and information obtained from prisoners showed that the enemy had intended to advance through a wide break in the Allied front, and within two days reach Montmirail and the Marne between Epernay and Châlons.

The enemy's check was particularly marked to the east of Rheims, where a number of divisions had been expended in sheer loss.

On the rest of the battle front the attacking formation of the enemy facing south and south-east, was definitely held.

The offensive capacity of the German armies was broken, and the Kaiser's battle was definitely lost. That of the Allies was about to begin.

When the enemy's attack opened on the 15th the question was raised whether the original

¹ March 21st: 40 divisions engaged on a front of 65 kilometres; May 27th: 38 divisions, of which 24 were used on the principal attacking front of 45 kilometres.

plan of an Allied counter-offensive was to be maintained.

Marshal Foch, whom this last effort of the adversary had neither surprised nor perturbed, gave the order to carry out on the date already set, July 18th, the counter-offensive that had been in preparation for two weeks.

It was conducted by American and French troops under the orders of Generals Mangin and Degoutte.

Launched without Artillery preparation,² but supported by a rolling barrage, and by a large number of tanks, this counter-offensive completely surprised the adversary who had believed that the Allied reserves were fast riveted to their defensive positions for the protection of Paris.

In two days the enemy lost 20,000 prisoners, and 400 guns.

In order to meet this unforeseen situation, the German Command was constrained to retire its troops from the Marne to the Aisne, at the same time protecting their west flank by powerful counter-attacks.

² Without any Artillery preparation for the Mangin army, and after an hour and a half of preparation for the Degoutte army.

Henceforward the initiative of operations belonged to the Allies.

Marshal Foch had opened the *offensive battle of the Nations of the West*: he proposed to continue it to the point of the total exhaustion and defeat of the enemy, regardless of how long it might take to obtain this decisive result.

If we have dwelt upon this starting point of the decisive act of the battle of 1918, it is because it marks an especially glorious date in the history of the army of the United States.

This was actually the first entrance of the American forces into offensive battle.

For the first time, five American divisions had been thrown solidly into action, and these divisions had shown under fire all the fighting qualities that had been expected of them.

They had revealed their spirit of initiative, their eagerness, their great courage and tenacity.

Like the machine-gunners of the scarcely formed Battalion of the Third Division at Château-Thierry, like the Marines at the Belleau Wood, like the regiments of the First Division at Cantigny, the men of the 42d, the Rainbow Division, brought face to face with the best Prussian troops, gained the confidence and won the hearts of their French comrades,

All the reports and correspondence of that time bear witness to this.

Such successes permitted the formation of a *first autonomous army* from troops already tested; and a great stride was taken in this direction, in the month of June, by the preparation of an American sector on the front, first on the Marne and later on the Aisne.

Meanwhile, the American Command did not hesitate to continue to sacrifice for the common good their desire for autonomy, and their anxiety to complete the training of their troops before sending them into battle.

Accordingly, the participation of the American forces in active fighting was extended in two ways:

1. By the formation of the first army, to be subject directly to General Pershing's orders;
2. By permitting the continued employment of isolated divisions in the British and French armies for a period of training in active warfare.

The object sought, as one may see, remained steadily the same: the formation of an army or armies that should be autonomous so far as was made possible by their surroundings, and the degree of training received by their units,—without, however, ceasing to provide constantly the maximum aid to the Allies.

It is quite certain that, owing to the speed attained in transportation, the number of divisions landed was often temporarily greater than it was possible to officer and equip with trained auxiliary corps essential to the formation of a single complete army.

Accordingly, the solution adopted met the well understood needs of the army of the United States, and at the same time satisfied the common interest created by the necessities of war.

By the 18th of June the United States forces in France had risen to 19 divisions, of which 12 were complete. Out of these twelve five were at the battle front, seven in calm sectors, five undergoing training in the British zone, one assigned to the base, and one to the dépôts.

One month later, July 20th, the American army comprised 27 divisions, eight of which were in battle and eleven in calm sectors.

The transportation was still further accelerated by improvements at the maritime bases, and by shortening the period required by the ships for each round trip.³

³ The principal causes of the growing efficiency of transportation throughout the first eight months of 1918 were:

- a. Increase in the number of ships employed;
- b. Increase of their carrying capacity by putting three men in each bunk;
- c. Shortening of the duration of round trips, reduced from an average of 50 days in January to 36 days after April 1st.

On August 1st the army numbered 30 divisions, and 1,145,747 men had been landed:

Thirteen divisions were at the front;

Five others were serving with the British army;

Six were being trained in the French zone;

Two were resting;

Three constituted the dépôt divisions.

The regiments of the division of colored troops were fighting with the French troops.

The training schools (both general and special) were operating with full efficiency under the ever firmer guidance of the American General Headquarters, and furnished in the single month of July more than 3,000 trained officers!

The first successes of the American army did not merely mark an important date in the history of the war. They represented the result on which the respective Governments had staked their hopes, and were the deserved recompense of those who had collaborated for a whole year to this end.

Both the English and the French had done their part in this common task and, although figures have only a relative value, it is still worth while to note that up to the moment

when the armistice was signed, France had been able to furnish to the American army:

136,881 horses;

1,871 75mm guns;

762 guns of 155 C. S.;

224 guns of 155 G. P. F.;

240 tanks;

2,676 airplanes with equipment;

Thousands of machine guns, machine rifles and engines of every sort.

Now all the material or provisions bought by the United States army in Europe, and particularly in France, economized to the advantage of the troops the tonnage which the transportation of these materials would have require.

The total purchases effected in France thus amounted to a saving in tonnage of 3,381,507 tons.⁴

These figures assume their full value when compared with the following figures:

⁴ The principal purchases in France of material or animals, represented in maritime tonnage may be summed as follows:

Horses and mules.....	1,085,776 tons
Wood.	1,361,944 "
Supplies for Ordnance Department.....	275,361 "
Aviation supplies.	190,000 "
Supplies for Medical Corps.....	39,697 "
Supplies for Signal Corps.....	16,995 "
Supplies for Chemical Warfare Service...	1,697 "
Supplies for Motor Transport Corps.....	3,770 "

Purchases made in England: 2,564,612 tons;

Purchases made in countries other than France and England: 4,218,016 tons;

Tonnage transported from America: from June, 1917, to May, 1918: 2,156,238 tons; from June to November, 1918: 4,059,635 tons.

Up to the last day of the war, the American Artillery fired French ammunition, and its consumption rose to the point of 100,000 shells in a single day.

During the three months, from September to November, an average of 300 trains per day, representing a daily mileage of 35,000 kilometres, were at the disposal of the American General Headquarters.

Lastly, 1,500 officers in France and 500 in America were at the disposal of the American General Staff. Many of them followed the American division from the training camp to the battle-field. The manner in which they fulfilled the part assigned to them in the war justified the confidence which the American General Staff had accorded them.

If we are permitted here to remind ourselves that seven out of ten of these officers fell in a single division, it is solely because we are proud that they gave the highest possible expression

to the Franco-American collaboration by giving it their lives.

A confident collaboration does as much honor to him who accepts it as to him who offers it. The collaboration of which we speak had its share in increasing the rapidity with which American divisions landing in France were sent into action.

It is unfortunately impossible for us to follow these splendid troops from their victorious counter-offensive of July 18th up to the preparation of the final offensive, in which they were destined to take so large a part on the 14th of November, when the armistice of the 11th halted them.

This would lead us to write the history of the entire battle, so intimately was the action of each army interwoven, in this last phase, with that of the armies beside it.

We rightly speak of the action of *each army*, for during the interval from July 18th to November 11th, the *autonomous American army* had time to take form and play an army's part in the war.

It was for the purpose of reducing the Saint-Mihiel salient that the 1st American army engaged in action for the first time directly under the orders of its Chief, whose

command also included several French units, coöperating in the attack.

This action had in view only a limited objective; but aside from the technical advantages which the Allied High Command obtained by this success, such as that of clearing the line of the Meuse, and of furnishing a good primary base for subsequent offensives, General Pershing found in it an opportunity to try out his army.

The test was conclusive: within twenty-seven hours the Saint-Mihiel salient had disappeared.

Henceforward the American forces were free to undertake army operations.

They went into action between Meuse and Argonne in one of the most war-racked zones of the whole battle front, but in the execution of an offensive movement susceptible of producing great results.

The nature of this battle ground offered great difficulties: it was cut by ravines, and protected on either side by two natural positions of defense: the Argonne and the Côtes de Meuse, intersected by the Meuse River. The enemy had here accumulated powerful means of defense, and regarded this naturally strongly fortified position as one of the essen-

tial bastions of his defensive system on the French front.

The taking of this bastion by the Allies would effectively expose the great Lille-Metz highway, which served as line of supplies for the whole enemy front. On the other hand, a general retreat of the German armies could not be carried out except by pivoting around the Meuse-Argonne front, the corner-stone of his positions.

It was for the purpose of conquering this formidable position that the American army was employed from September 26th to November 11th.

It was a series of magnificent combats that well deserve to be recorded, and some day will be by the very men who took part in them during the Meuse-Argonne battle, in which General Pershing, between September 26th and November 11th, engaged 580,000 men, and suffered 148,000 casualties.

On September 26th and 27th Montfaucon was taken and left behind, Varennes and Vauquois were captured, in the advance along the Meuse, and the Forges Woods were turned on the East; 8,000 prisoners and 100 guns in two days.

From September 27th to October 4th, in a

series of local skirmishes, in which the honors were carried off by the American doughboys and their squad commanders, the ground was won foot by foot, until the arrival of the Artillery and supplies at last permitted the resumption of the general forward movement.

On the evening of October 3d the first two positions of the German defensive position (*Hindenburg* and *Hagen Stellungen*) were entirely cleaned out, but the enemy still clung to his third position (*Kriemhilde*).

The American army attacked it on October 4th: fierce fighting and slow progress at the price of severe losses. While the 28th and 82d divisions advanced along the Aire in conjunction with the 4th French army, the attacks of the 42d division upon Romagne, and of the 32d on Hill 288, bent in the enemy's principal position on a front of two kilometres.

On October 21st the 5th division, after four successive attacks, made itself master of the Rappes Woods, while the 78th captured Grandpré.

The American front now extended from Grandpré clear to the north of Brioules-sur-Meuse.

The fighting which had assumed a character of unprecedented ferocity, was now destined

to moderate steadily from the 1st to the 11th of November.

The enemy were expecting an attack; they were growing more and more nervous, and were preparing for a general retreat behind the Meuse.

On November 1st the American troops took almost the whole extent of the 4th German position known as the *Freya Stellung*, and captured 3,602 prisoners.

From this moment the disorganized Germans could no longer make a stand, and the American army pursued them without respite.

From the 1st to the 4th of November the Americans advanced 18 kilometres, taking 3,000 prisoners and 100 guns.

Hereupon, swinging upon his 5th division as his right hand pivot, General Pershing forced the passage of the Meuse, and on November 10th arrived under Sedan.

The whole left bank of the Meuse was cleared. The great Lille-Metz line of communication was cut, and the enemy was in full retreat.

But the armistice interrupted the German disintegration.

In these two weeks of ferocious fighting the

American soldier had clearly proved his superiority over his adversary.

On March 11th, 1919, at a dinner given to the American Delegation at the Peace Conference, Marshal Foch himself undertook to outline in the sober tone of a bulletin of victory, the rôle played by the United States army in the battle of 1918.

No other recital could have the precision and weight of his statement. It sums up all that has been said above, and far better than we ourselves could do it. Hence we take the liberty of reproducing it:

“One year ago, on March 11th,” said he, “the American army in France numbered only 300,000 men, that is, 6 divisions of Infantry undergoing training.

“It was arriving at the rate of 30,000 men a month.

“On March 21st the German offensive was launched at the junction of the Allied armies in the region of Saint-Quentin. You know its effects. It soon won the Scarpe; it ascended the Somme, which it crossed, reached the Oise, which it descended. The situation was grave.

“At that critical time, on March 28th, Generals Pershing and Bliss came to make me the generous offer of entering the fight, both

telling me: 'We are over here to get ourselves killed; all our troops are at your disposal: where do you want us to go?'

"Shortly after this, on April 25th, I met these same Generals again at Sarcus; on May 2d, at Abbeville, according to an agreement with the Allied Governments, we asked the Government of the United States to send to France each month 120,000 Infantrymen, machine gunners and complimentary troops.

"In point of fact, America sent us during the month of March 69,000 men, 94,000 in April, 200,000 in May, 245,000 in June, 295,000 in July, 235,000 in August.

"The American forces increased from 300,000 men on March 11th to 954,000 in July, and 1,700,000 in October.

"On June 2d the Superior War Council at Versailles requested President Wilson to continue the same transportation of troops, from 200,000 to 300,000 men per month, and to prepare 100 American divisions for the spring of 1919. President Wilson replied that he agreed to this, and if more were needed, we should have them.

"Meanwhile, however, the American troops were not inactive. Since the month of May, two divisions of American Infantry had been

in action with the 1st French army in the region of Montdidier; three in the Vosges, where they had relieved French troops; two were still in training.

“In June two more divisions were on the Marne, at Château-Thierry and the Belleau Woods, where they took a large part in holding the enemy in check.

“On July 18th five American divisions participated in the victorious counter-offensive of the 10th and 5th French armies, and contributed largely to its success.

“On July 24th the First American army was created, under the command of General Pershing. Its task was to open up communications between Paris and Nancy, by driving back the enemy from Saint-Mihiel.

“On September 12th fourteen American divisions, eight in the first line and six in the second line, captured the salient of Saint-Mihiel, taking 200 guns and 15,000 prisoners.

“A few days later, on September 26th, fourteen American divisions were engaged in a great offensive in the rugged region of the Argonne, between the Aisne and the Meuse. On the second day Montfaucon was passed; on October 14th Grandpré was taken; on the 21st, Châtillon; on the 30th, Banthevillé; on

November 1st, Busancy; on the 4th, Beaumont; and by the 9th, the entire line of the Meuse, from Mouzon to Bazeilles, was in our power.

“At the same time two American divisions were collaborating with the 5th French Army in the direction of Romans; two others with the English armies in the region of Saint-Quentin; still another two in coöperation with the 4th French Army had taken the formidable positions of Orfeuil; besides this two American divisions participated in the offensive of the forces in Flanders along the Lys and the Escaut. Lastly, six more divisions were with the French Army preparing for the Lorraine attack of November 14th, when the armistice of November 11th caused us to lay down our arms.

“In such manner the American Army, backed by a Government firmly resolved to prosecute the conflict to the end, returned the visit paid by Lafayette on the occasion of the birth of America.

“In such manner it contributed powerfully in obtaining a victory by armistice, which was equivalent to a surrender, an unconditional surrender.

“It is in recalling those moving memories,

those days of anxiety and success, that I raise my glass in honor of President Wilson, who so valiantly supported this war, in honor of my American comrades at arms, generals and soldiers; equally glorious, who rendered decisive the victory of liberty."

Such were the words of the chief who had led to the assault upon Germany six million men belonging to six different nations. And as I listened, I recalled his observation on February 27th, 1918, a few days before the German thrust in Picardy: "With American forces joined with the Allied forces, I could easily find the formula of an offensive battle that would unquestionably break down all before it."

The army of General Pershing had responded to that inner appeal of the leader who, ever since the 11th of November, 1914, the last great day of the struggle in Flanders, had never ceased to work and to brood unweariedly for victory.

"Victory," said Marshal Foch at the end of November, 1918 (and he was very fond of this comparison), "victory is the *inclined plane* down which the ball rolls, very slowly at first, then faster and faster, until there is no stopping it."

The American Army, going into action at the precise moment when the ball was starting to roll, when Germany was beginning to slip down the inclined plane of the Western front, contributed all its energy to precipitate Germany's fall which had now become inevitable.

CONCLUSION

Now that we have surveyed the military effort of the United States on the two sides of the Atlantic, what judgment as a whole should we pass upon it, and what first lesson should we draw from it?

America took up arms in the last phase of the world war, without being in any manner prepared for it. In order to reach a decisive battle, she was obliged to solve a problem unique in the history of war: that of raising, organizing, training and equipping an army of 3,600,000 men, and transporting across the Atlantic 2,000,000 soldiers in less than twenty months, without interrupting the war supplies which she had assured to the Allies.

This problem, the extent and complexity of which might well stagger the most confident, America solved, thanks to the determination of her rulers and military chiefs, and to the energy of her *entire people*.

But it was only through the collaboration of powerful allies that she solved this problem *in time*; and herein lies for her as well as for

us, the first lesson to be retained from our common victory.

We have seen that, from early in 1917, the certainty of America's military intervention gave to the Allies that surplus of moral strength which they then needed, to efface the disappointment caused by the arrest of the offensive of April 14th, and by the more and more sombre prospect of the collapse of Russia.

After the experience of 1917, which had been fraught with danger for them, the Allies, and more especially France, had staked all their hopes on the campaign of 1918. They had the firm conviction that America was to play a great part in it; nevertheless, they felt a real and justifiable anxiety at the opening of 1918; for notwithstanding the importance of the efforts already accomplished on American soil, it was by the number of divisions thrown into battle that the practical result would have to be measured.

Now, in spite of her immense resources and consequently of her military non-preparedness, America, *if left to herself*, without British tonnage, without French materials of war, without practical training by the Allied armies, would have arrived *too late* to play her part in

the final act. But America had already realized that the solution of the world crisis was approaching, and she resolutely appealed for inter-Allied collaboration, in order to complete the solution of those problems of organization, instruction and transportation for which she had not prepared in times of peace.

This was how America succeeded in bringing into action simultaneously twenty-eight divisions of 27,000 men each in the battle of 1918.

She was ready to throw in the additional weight of her divisions of reserves, she was ready to form new divisions and to bring her forces up to the fighting strength of the nations with which she was associated, in that ultimate self-sacrifice which is synonymous with victory: when the operations were suspended.

By this moral and material aid, direct and indirect, and steadily more and more efficacious, America, to borrow Marshal Foch's own expression, "contributed powerfully in obtaining victory by armistice, which amounted to a complete capitulation."

If through force of circumstances, the share of military glory which fell to her army November 11th, 1918, was not so great as she

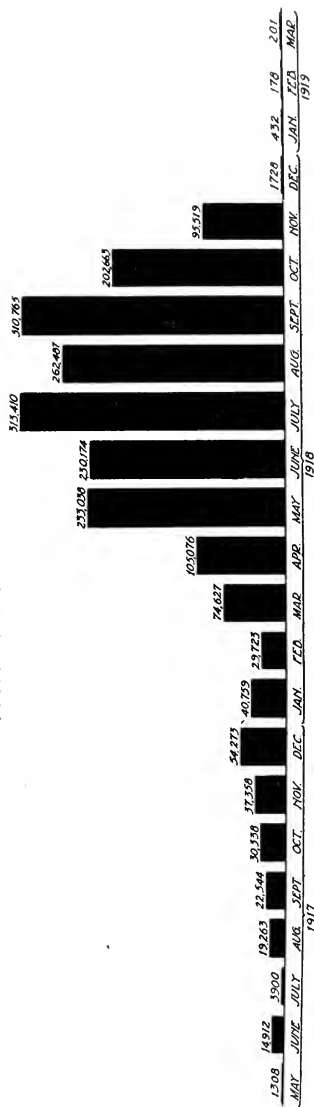
would have wished, this sentiment does her honor; for it was due to the great and legitimate ambitions it had conceived that this army was able in so short a time to accomplish such great things, and to be in a position to continue them.

It had not been called upon to take part in the long and bloody series of battles from 1914 to 1917. But it knows and will remember what it owes to all those who died in preparing the way for it. Its history would be incomplete if it did not include that of those nameless heroes of whom half a million¹ fell in the single year of 1917, while protecting the formation of the United States army.

This army was spared the knowledge of those terrible days when, owing to lack of munitions, it became necessary to stop a hurricane of iron with human breasts; nor those other days of short-lived glory when the finest waves of assault broke against obstacles incompletely destroyed. But the Allies will never forget, on their side, that America from that time onward assured them the supplies indispensable for carrying on the war, nor that she continued to furnish them later, without stop-

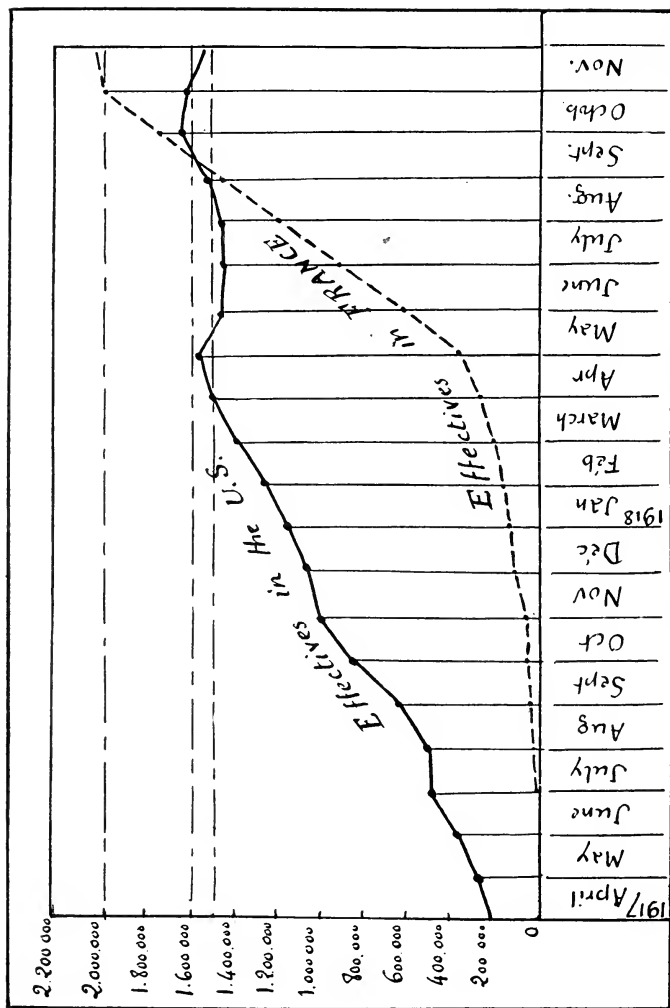
¹ Losses in killed, died, missing or prisoners, for 1917 alone: British, 231,000; French, 243,000.

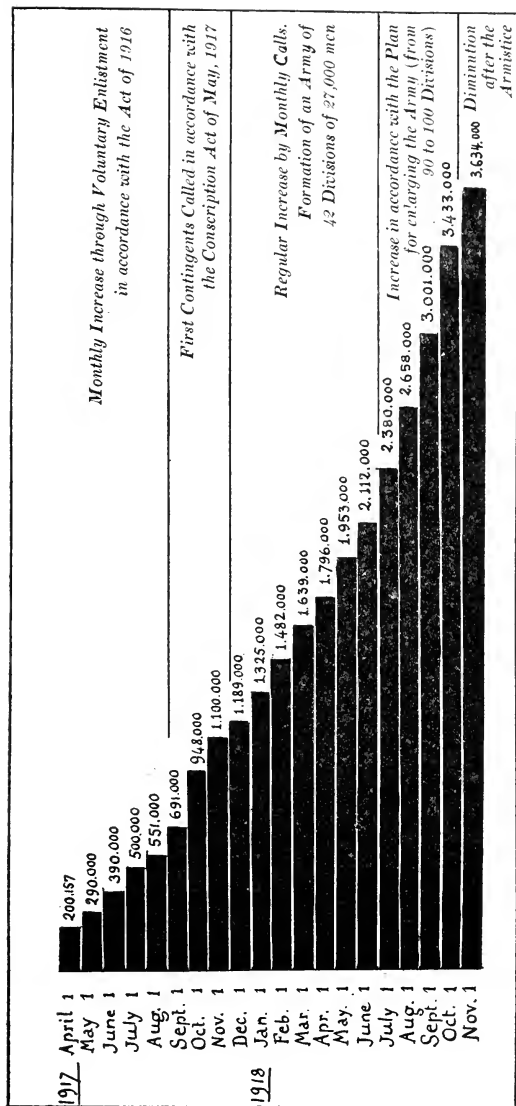
MONTHLY ARRIVALS



TROOP ARRIVALS IN AMERICAN EXPEDITIONARY FORCES.

Figures include officers, enlisted men, field clerks, and nurses, but do not include civilians which accompanied A.E.F. They also include marines and such navy personnel as were reported as arrivals.
 (Data from Personnel Division, G-1, G.H.Q. A.E.F.)





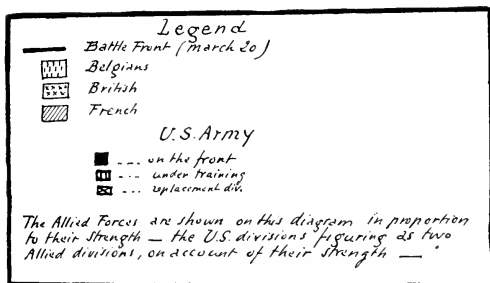
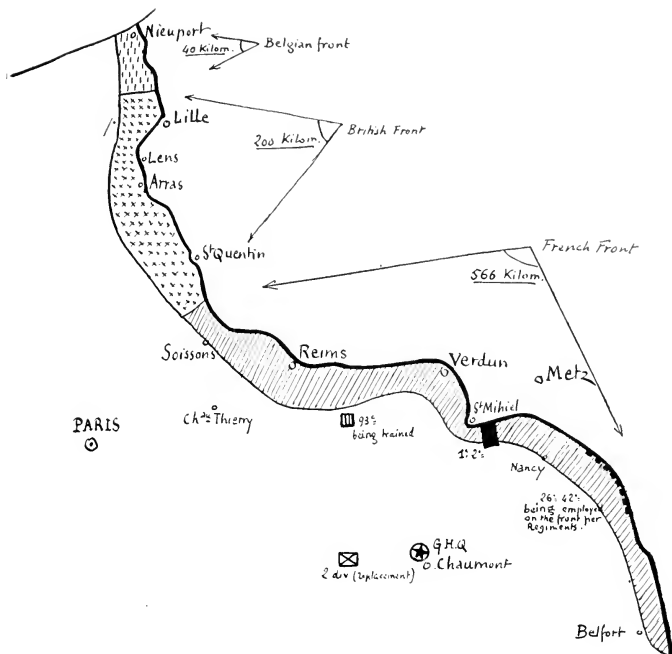
PROGRESSIVE INCREASE OF THE AMERICAN ARMY, FROM APRIL 1, 1917, TO NOVEMBER 1, 1918.

May	1,308	
June	16,220	
July	20,120	
August	39,383	
September	61,927	
October	92,266	
November	129,623	
December	183,896	
January	224,656	
February	254,378	
March	329,005	
April	434,081	
May	667,119	
June	897,293	
July	1,210,708	
August	1,473,190	
September	1,783,955	
October	1,986,618	
November 11 (Armistice)	2,057,675	

1917

1918

MONTHLY INCREASE IN AMERICAN EFFECTIVES DEBARCKED IN EUROPE FROM MAY, 1918, TO THE ARMISTICE OF NOVEMBER 11, 1918.
(Figures are Cumulative.)























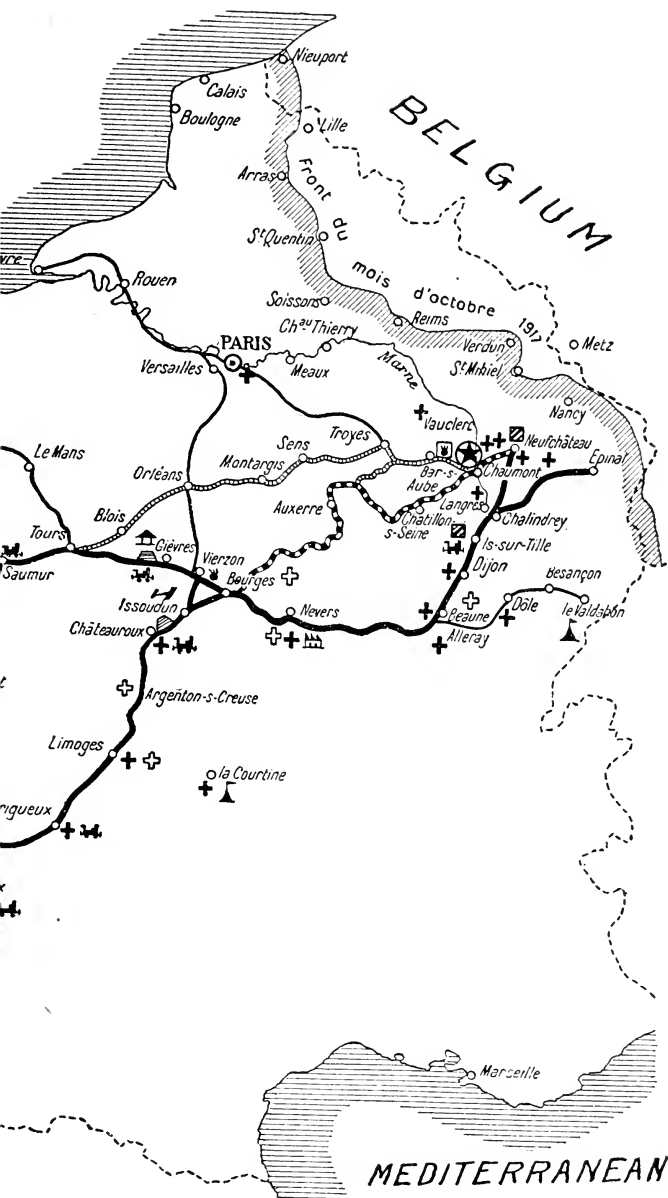
SITUATION OF THE AMERICAN FORCES IN FRANCE ON THE EVE OF THE GERMAN OFFENSIVE IN PICARDY. (MARCH 20, 1918.)

ENGLISH CH

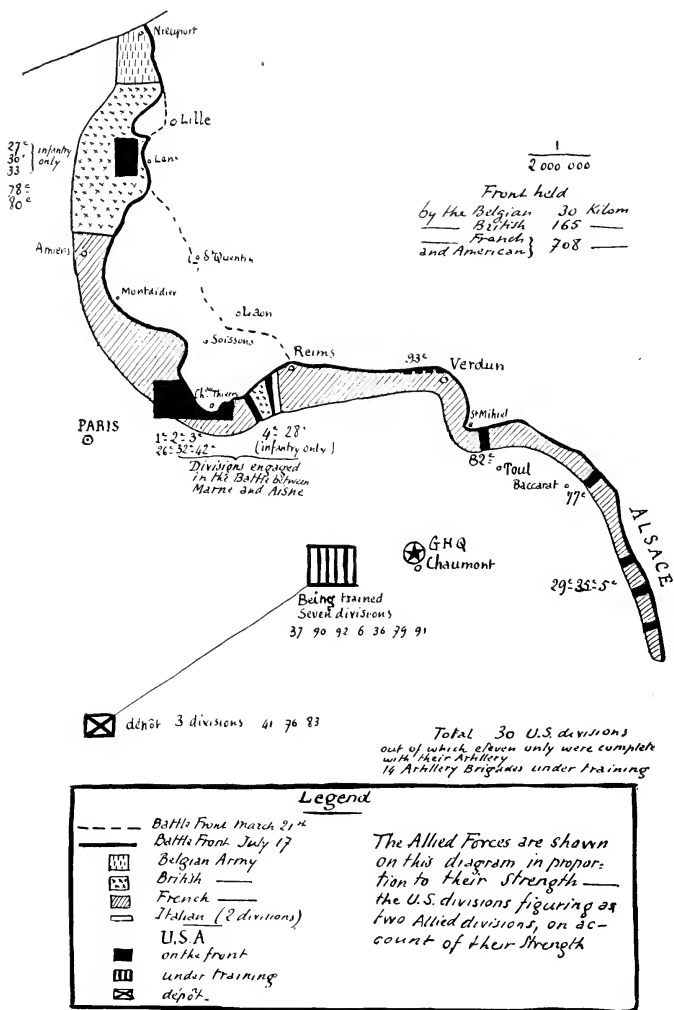
ATLANTIC OCEAN

LEGEND

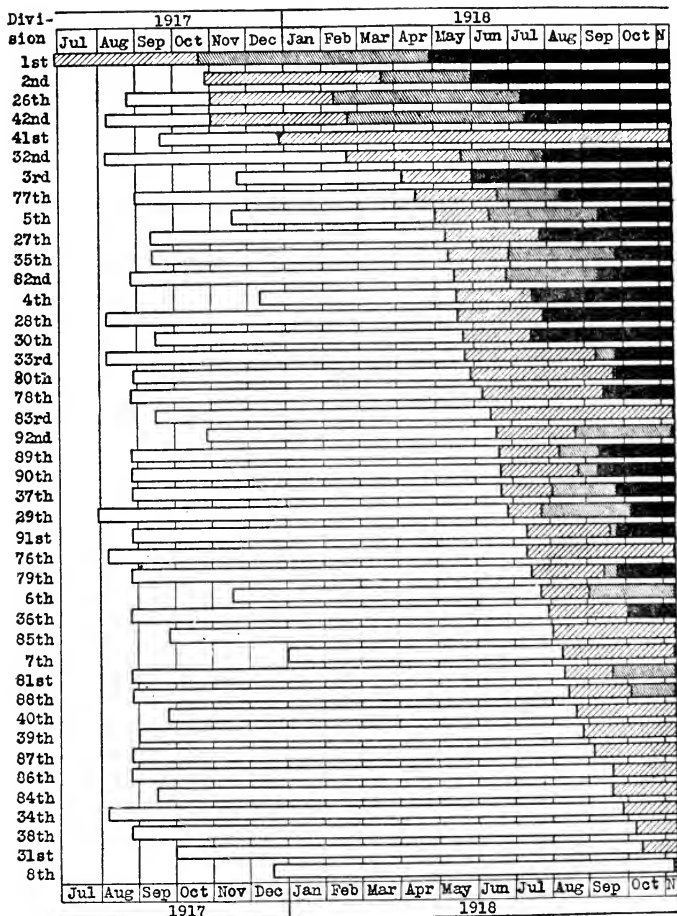
-  Main Line of Railway Transportation
-  Second Line of Railway Transportation
-  Third Line of Railway Transportation
-  Other Lines Used by the A. E. F.
-  Allied Battle Front, October, 1917
-  General Headquarters A. E. F.
-  Ports used by U. S. A.
-  Debarkation Camps
-  Instruction Camps
-  Aviation Camps
-  Ammunition Depots
-  Storage Depots
-  Ammunition Yards
-  Regulating Yards
-  Rest Stations
-  Base Hospitals
-  Refrigerating Plants
-  Locomotive Facilities
-  Car Erection Shops
-  Repair Shops



ED LINES OF COMMUNICA-
OF 1917-1918.)



EMPLOYMENT OF THE AMERICAN FORCES IN BATTLE. (AUGUST, 1918.)







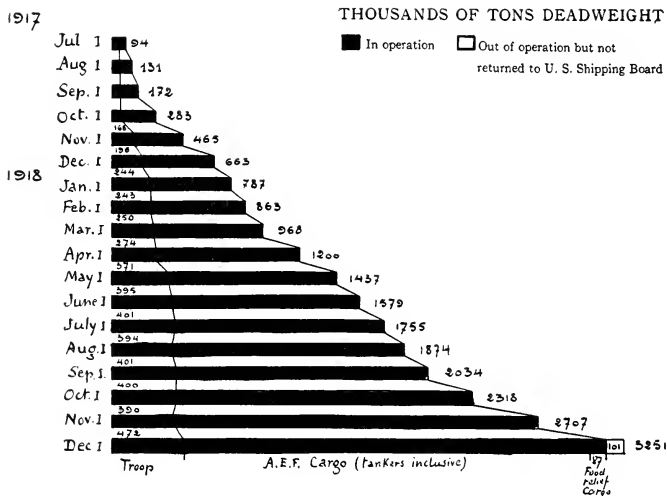
-  Organization to arrival in France
-  Arrival in France to entering line
-  Entering line to active battle service
-  Service as active combat division

Diagram 13.—Time from organization of divisions to entering line.

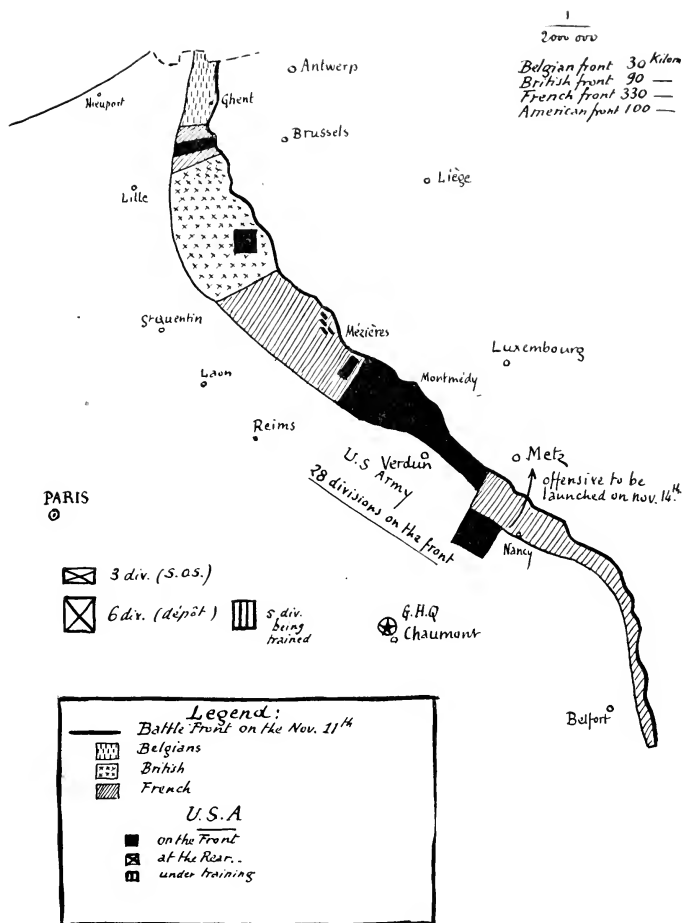
TIME FROM ORGANIZATION OF DIVISIONS TO ENTERING LINE.



TRANSATLANTIC TONNAGE UNDER ARMY CONTROL.

Total tonnage under Army control exclusive of Cross-channel Service and British Loan.

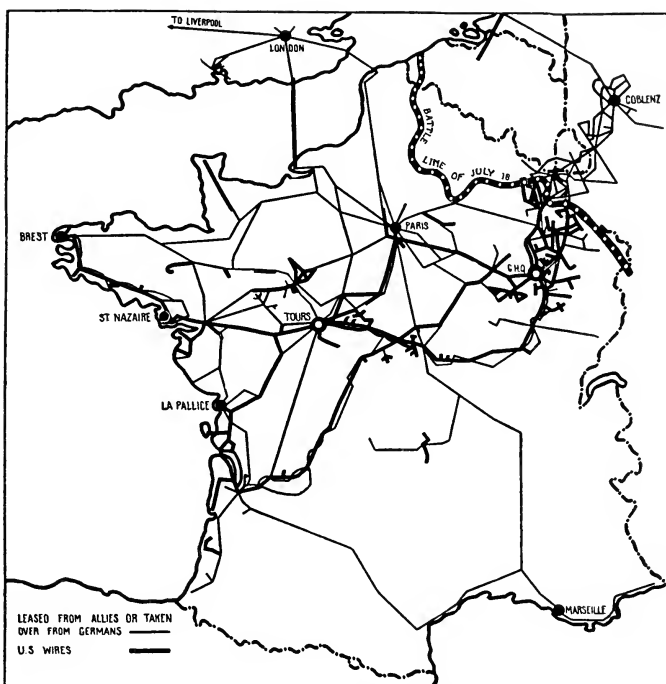
Cargo ships authorized for release are regarded as out of operation upon arrival in home ports. Similarly, cargo ships for conversion to troop ships are classified as troop ships upon arrival in home ports.



SITUATION OF THE AMERICAN ARMY AT THE SIGNING OF THE
ARMISTICE, NOVEMBER 11, 1918. (11 o'clock.)

	Men	Per cent
New York	367,864	9.79
Pennsylvania	297,891	7.93
Illinois	251,074	6.68
Ohio	200,293	5.33
Texas	161,065	4.29
Michigan	135,485	3.61
Massachusetts	132,610	3.53
Missouri	128,544	3.42
California	112,514	2.98
Indiana	106,581	2.83
New Jersey	105,207	2.80
Minnesota	99,116	2.64
Iowa	98,781	2.63
Wisconsin	98,211	2.61
Georgia	85,506	2.28
Oklahoma	80,169	2.13
Tennessee	75,825	2.02
Kentucky	75,043	2.00
Alabama	74,678	1.99
Virginia	73,062	1.94
N. Carolina	73,003	1.94
Louisiana	65,988	1.76
Kansas	63,428	1.69
Arkansas	61,027	1.62
W. Virginia	55,777	1.48
Mississippi	54,295	1.44
S. Carolina	53,482	1.42
Connecticut	50,069	1.33
Nebraska	47,805	1.27
Maryland	47,054	1.25
Washington	45,154	1.20
Montana	36,293	.97
Colorado	34,393	.92
Florida	33,331	.89
Oregon	30,116	.80
S. Dakota	29,686	.79
N. Dakota	25,803	.69
Maine	24,252	.65
Idaho	19,016	.51
Utah	17,561	.46
Rhode Island	16,861	.45
Porto Rico	16,538	.44
Dist. of Col.	15,930	.42
N. Hampshire	14,374	.38
New Mexico	12,439	.33
Wyoming	11,393	.30
Arizona	10,492	.28
Vermont	9,338	.25
Delaware	7,484	.20
Hawaii	5,644	.15
Nevada	5,105	.14
Alaska	2,102	.06
A.E.F.	1,499	.04
Not allocated	1,318	.04
Philippines	255	.01
Total	3,757,624	

SOLDIERS FURNISHED BY EACH STATE.



AMERICAN TELEPHONE AND TELEGRAPH LINES IN FRANCE,
ENGLAND, AND GERMANY.

ping to consider whether it would hamper or delay the organization of her own industries of war.

Accordingly, the army of the United States benefited, beyond doubt, by the tragic experience and dogged effort of the veterans of war who had become her brothers at arms. But, when the moment arrived to enter the struggle beside them, she threw herself into it resolutely and without counting the cost.

That is why the battle of 1918 ought to suffice for her glory; her soldiers also have inscribed the names of *The Marne* and *Verdun* on their banners.

After those brief halts known as Cantigny, Château-Thierry and the Belleau Woods, they arrived at Saint-Mihiel, proclaiming by full victory the existence of their new army.

Then in the course of the arduous, costly and glorious battle of the Meuse-Argonne, they opened before them the road which lead them to the Rhine, the frontier of liberty.

From 1917 to 1918 America, often ignorant of the difficulties, but conscious of her strength, kept repeating that she meant "to win the war."

Did America win the war?

For that matter, did France win the war?

Did England, Italy, Servia, or any single one of the nations who fought against the common enemy, win the war?

This same question in different form calls for but a single answer:

The Allied and Associated Powers *all together* "obtained a victory by armistice which amounted to a complete capitulation," and each one of them "contributed" to it.

Marshal Foch adds that America "*powerfully contributed*" — and it is as far from his thoughts, as it should be from ours, to establish a scale of merit in our several contributions to victory.

On the contrary, it will help to maintain our union in peace, if each one of us will take a backward glance over the past and examine impartially the facts and their causes and consequences. Each will find in them sufficient reasons for being legitimately proud of his country, while at the same time remaining modest in relation to his allies and associates in the war.

In point of fact, we obtained our victory, *all of us together*, from the day when we applied the two principles that have dominated the

whole of this world-war: Unity of Command and Inter-Allied Coöperation. America has loudly proclaimed the first; and yet even she did not dare to demand its application before engaging in battle.

America approved the principle of inter-allied coöperation; but it required the enemy's onslaught, with all its too familiar violence, to force upon all of us, *without exception*, the full application of this principle.

Accordingly, it was the war itself which taught us, and it was the battle of 1918 which saved us; because, being obliged to sustain the fight to the finish, that is to say, to become either victors or vanquished, we acquired in addition to that determination to conquer which had united us, the willingness to accept every means to this end.

America devoted to it all her own without restriction or limit. Her people never delayed by a single day the decisions that had to be made by their Government.

They never ceased to demand more than was being done, and to do more than they had promised to do.

They marched to the battle front, borne on by a heroic breath, and having set forth late,

they were forced to run in order to arrive in time.

Glory cannot be reduced to figures. That of America does not depend upon the number of her soldiers nor upon the number of her dead, any more than it is affected by the mistakes and the delays which are inevitable in the difficult accomplishment of so great a task.

Her glory rests in having had a part in the War of the Nations of Europe, in spite of all the obstacles which might have kept her from it.

The glory of her Commander in Chief lies in having brought into action first his division and later his army at whatever point the Commander in Chief of the Allied forces called upon him to do so; it lies in having anticipated this appeal and in having himself offered to test out an army, barely formed the previous eve, under fire of the greatest battle in history.

The glory of her soldiers lies in having gone into action with their organization barely completed and their training still unfinished, making up for this lack by energy, courage, irresistible enthusiasm, indomitable steadfastness and, to sum up in a single word, that fine self-confidence which was to have been expected from so great a people.

**DEFINITIVE LOSSES OF THE ALLIED AND ASSOCIATED
NATIONS DURING THE WAR**
(Exclusive of the Disabled from Wounds)

	KILLED — DEAD OR MISSING	TOTAL INHABITANTS	PERCENTAGE OF THE TOTAL POPULATION
Russia.	1,700,000 (?)	170,000,000	1 %
France.	1,369,000	38,000,000	3.6 %
Great Britain and Dominions	840,000	68,000,000	1.25 %
Italy.	460,000	37,000,000	1.24 %
Serbia.	370,000	4,500,000	8.2 %
Roumania. . . .	150,000	8,000,000	1.87 %
United States ¹	75,039	102,000,000	0.07 %
Belgium.	40,000	8,000,000	0.5 %
Montenegro. . .	20,000 (??)	430,000	4.6 % (??)
Greece.	12,100	5,000,000	0.24 %
Portugal.	8,500	6,000,000	0.14 %
Japan.	1,000 (?)	56,000,000	0.001%

¹ Killed in action.	32,842
Lost at sea.	733
Died of wounds.	13,554
Died of accident.	4,640
Died of disease.	23,270
Total deaths.	75,039

INDEX

- ABBEVILLE, 192
- Administration reforms, 105-113
- Aerial observation, 65
- Air Service, 24
- Aire, 189
- Aisne, 174, 175, 179, 181, 193
- Allied Commissions, 30
 - Counter-offensive, 179
- "Amalgamation," no question of, 124
- America indulged in experiments, 29
 - "powerfully contributed to victory," 202
 - ready for all sacrifice, 159
- America's "impotence," 153 mistakes, 29
- American Army, first successes of, 183
 - in times of peace, 25
 - weak points of, 129
- Forces, first entry in battle, 188
- Forces, participation extended, 181
- Front, 189
- Military Commission in Paris, 94
- Sector, 181
 - trait, regrettable, 28
- Ammunition, consumption of, 64
- Anglo-French Front, 8
- Argonne, 177, 187, 193
- Armistice of Nov. 11, 1918, 136, 194
- Army Schools, 128, 171
- Arsenals (U. S.), 75
- Artillery, training of, 169
 - matériel, 63, 75-78
 - matériel, lack of, 47
 - matériel, superiority of French, 67
 - School at Fort Sill, 96
 - School at Saumur, 128
- Austrian Army, 7
- Autonomous American Army, 186, 187
- Aviation, 80-82
 - Equipment, furnished by France, 141
 - Programme, 141
 - Schools at Issoudun, 171
 - Service, 81
- BAKER, NEWTON D., 39, 94, 112, 150, 160
- Bar-sur-Aube, 125
- Banthevillé, 193
- Belgian Army, 3, 134
- Belleau Woods, 180, 193, 201
- Bombing Aviation, 65
- Bordeaux, 120, 165
- Bordeaux-Limoges line, 121
- Bourges, 121, 122
- Bourges - Auxerre - Chaumont line, 121
- Bourges-Nevers-Dijon line, 121
- Bliss, General, 191
- Brest, 120, 121, 165
- Bridges, General, 91-92
- Brieculles-sur-Meuse, 187
- Brigading of American forces with French, 125, 176
- British Army, 2, 137
- British Commission, 95
- British Reinforcements, 175
- British Training Officers in America, 91, 95, 96, 161
- Bulgarian Army, 7, 8
- Busancy, 194

CAMPAIGN OF 1917, 13
 Cantigny, 180, 201
 Cantonment Zones in France, 125
 Châlons, 178
 Chamberlain, Senator, 163
 Champagne Front, 177
 Château-Thierry, 177, 178, 180, 193
 Châtillon-sur-Seine, 125, 193
 Chaumont, 119, 121
 Chief of Staff, American, 107
 lacking high authority, 23
 Clemenceau, 119, 120, 156
 Coalition, Battle of the, 156
 Coast Artillery, 145, 146
 Coetquidan, 125
 Colored troops, 60, 62, 140
 brigaded with French forces, 183
 Conscription Act of 1917, 162
 Corps Schools, 128, 171
 Côtes de Meuse, 187
 Counter-offensive of July 18, 1918, 186, 193
 Crowder, Provost Marshal, 184

 DEBARKATION, PORTS OF, 120
 Degoutte, General, 177, 179
 De Haviland Aeroplane, 81
 Demonstration Battalion, 169
 Dépôts in France, American, 122
 Dijon, 121
 Dinner to American Delegation, 191
 Division (A.E.F.), 1st, 139, 140, 143, 180
 2d, 139, 140, 143
 3d, 142, 180
 4th, 142
 5th, 189
 26th, 140, 143
 28th, 189
 33d, 140
 41st, 140
 42d, 140, 143

78th, 189
 82, 189
 Rainbow, 180
 former American type of, 19, 20.
 new American type, 50, 51
 foreign type, 50
 Dormans, 177

 ECOLE SUPÉRIEURE DE GUERRE, 111
 Engineers, 145
 Escaut, 194
 Freya Stellung, 190

 FIRST AMERICAN ARMY, 186
 Flanders, 132, 174, 195
 Foch, Marshal, 111, 134, 137, 148, 150, 157, 158, 166-69, 176, 177, 179, 180, 199
 defines Victory, 195
 offensive plan for 1918, 133-34
 opinion of American Army, 149
 speech at Dinner to Delegates, 191-195
 Forces in France, American, 147, 182, 183, 191, 192
 Forges Woods, 188
 Franco-American Affaires, Central Office of, 119
 French Army, 5, 134
 on Italian Front, 135, 175
 on Salonica Front, 135, 175
 French Artillery equipment sent to American Training Camps, 144
 Commission at Chaumont, 118
 Offensive of 1917, halt of, 10-11
 Officers at disposal of American Army, 185
 Training Officers in America, 91, 95, 161

- GANNE, M., 119
 General Headquarters in
 France, American, 118,
 123, 183, 185
 General Staff, American, 30,
 31, 70
 defects of, 23, 94
 problems of, 46-48
 reorganization of, 106, 109
 German Army, 6
 General retreat, 188, 190
 General Staff, 10, 44, 132
 losses, 179
 Offensive of 1918, 148, 152,
 168, 174, 175, 178, 191
 Press, 154
 prisoners taken by Ameri-
 cans, 190, 193
 Germany's defeat inevitable,
 196
 game, 44
 maximum effort, 6
 war matériel, 7
 Glory of America, 201, 204
 Grandpré, 187, 193
 HAGEN STELLUNG, 189
 Hill 288, 189
 Hindenburg Stellung, 189
 Hospital accomodation in
 France, 126
 INDUSTRIAL BREAKDOWN, UN-
 FOUNDED REPORT OF, 81-82
 Instruction Camps, Divi-
 sional, 48
 Inter-Allied, Conference at
 Chantilly, 1
 Coöperation, 92, 102, 199,
 203
 Reserve, 137
 Supreme Council of War,
 134
 Interned Enemy Vessels used
 as transports, 48
 Is-sur-Tille, 121
 Italian Army, 3, 134
 Front, 8
 Italy, disaster in, 132
 JOFFRE, MARSHAL, iii, 48, 66,
 89, 93, 122, 171
 Kitchener, 114
 Kriemhilde Stellung, 189
 Kuhn, General, 48
 LA COURTINE, 125
 Lafayette, 194
 Lane, Secretary, 27
 Langres, 125, 128, 171
 La Pallice, 120, 121
 Le Mans, 121
 Lessons of the War, 203
 Liberty Motor, 80, 81, 141
 Lille-Metz Highway, 188, 190
 Lys, 194
 MACEDONIAN FRONT, 8
 Mailly, 146
 Main-de-Massiges, 177
 Mangin, General, 177 179
 March, Gen. Peyton C., 112,
 151, 155, 165-68, 172
 Marines at Belleau Woods,
 180
 Marne, 168, 174, 177-79, 181,
 193
 Battle of, 64
 Matériel, defined, 32 (note)
 Mead, Camp, 62
 Meucon, 125
 Meuse, 187, 190, 193, 194
 Meuse-Argonne, Battle, 201
 Front, 188
 Milner, Lord, 157
 Monastir, 5
 Montdidier, 174, 193
 Montfaucon, 188, 193
 Montmirail, 178
 Morale, effect of despatch of
 American troops on
 French, 11
 Mouzon, 194
 NANCY, 193
 Nantes, 120, 121
 National Guard, 25, 56
 Neufchâteau, 125

- Nevers, 121, 122
 New York, 26
 Niort, 121
 Non-preparedness, America's,
 17, 198
 Noyon, 174

 OFFICERS' SCHOOLS, 86-87
 Oise, 191
 Open Warfare, 167
 Ordnance Department, de-
 fective, 77
 Reorganization of, 106-108
 Orfeuil, 194
 Orléans, 121

 PARIS, 174, 177
 Paris-Nancy line, 175
 Pershing, General, 32, 33, 36,
 39-42, 45, 46, 59, 84, 90,
 91, 93, 103, 113-118, 122,
 125, 129, 130, 139, 142,
 146, 151-53, 155-57, 164,
 169-71, 176, 181, 187-91,
 193, 195
 Pétain, General, 153
 Petrograd, Revolution in, 132
 Picardy, 153, 195
 Front, 152
 Prussian troops, 180

 QUARTERMASTER CORPS RE-
 ORGANIZED, 106, 108, 109

 RAINBOW DIVISION, 180
 Reading, Lord, 154
 Regular Army, 25, 54, 55, 85
 Replacement Camps, 166
 Rheims, 177, 178
 Romagne, 189
 Roumanian Army, 4, 5
 Rock Island Arsenal, 75
 Russia, collapse of, 2, 198
 events in, 13
 Russian, Army, 3, 4
 Revolution, 10
 Russo-Roumanian Front, 7, 8

 SAINT-MIHIEL, 164, 186, 193,
 201
 Saint-Nazaire, 120, 121, 165
 Saint-Quentin, 191, 194
 Salonica, 175
 Sarcus, 192
 Saumur, 121
 Scarpe, 191
 School of Fire for Field
 Artillery, 22
 Scott, General, 48, 109
 Sedan, 190
 Serbian Army, 5
 Seventh Regiment (N.G., S.
 N.Y.), 57
 Sixty-Ninth Regiment (N.G.,
 S.N.Y.), 57
 Somme, 191
 Battle of the, 68, 114
 Souges, 125
 Special Services, 53, 128
 Staff School, 128
 Supplies furnished A.E.F. by
 France, 184
 Supplies furnished A.E.F. by
 England, 185
 Supreme Control, lack of, 60

 TABLES OF ORGANIZATION, 54
 Tardieu, André, 71, 95, 120
 Tours, 121, 122
 Training the Army, 32, 82-
 100, 123
 in France, cycle established
 by Pershing, 126-127
 Training Camps, 62, 63
 for Reserve Officers, 86
 Training Committee, 84, 85
 Schools, 183
 Transfers of soldiers during
 training, harm done by,
 97
 Transportation of troops, 46,
 47, 100-105, 147, 158, 182
 Trench Warfare, 167
 Troves, 121
 Turkish Army, 8

UNITY OF COMMAND, 203

VALDAHON, 125

Varennés, 188

Vauquois, 188

Verdun, 44

Versailles, 138, 192

Council of, 166

Victory by Armistice, 202

WAR COLLEGE, 22, 48, 96, 101,
109

War Council, 106, 107

War Department, reorganiza-
tion of, 38, 106

War Factories, American, 173

War Matériel, 63, 69, 70, 72,
73, 79

Watertown Arsenal, 75

Watervliet Arsenal, 75

Wilson, Woodrow, 16, 18, 30,
113, 147, 149, 152, 155,
158, 159, 164, 192, 195

Speech at Baltimore, 154

Woëvre, 140

H . 46-79

Deacidified using the Bookkeeper process.
Neutralizing agent: Magnesium Oxide
Treatment Date: **MAY** 2001

Preservation Technologies

A WORLD LEADER IN PAPER PRESERVATION

111 Thomson Park Drive
Cranberry Township, PA 16066
(724) 779-2111



DEC 78

N. MANCHESTER,
INDIANA 46962

LIBRARY OF CONGRESS



0 007 690 878 3